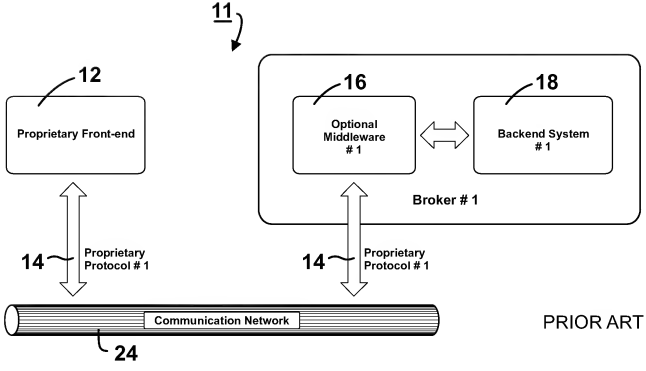

11
12
Proprietary Front-end
16
Optional Middleware # 1
18
Backend System # 1
Broker # 1
14
Proprietary Protocol # 1
14
Proprietary Protocol # 1
Communication Network
24
PRIOR ART

FIG. 1

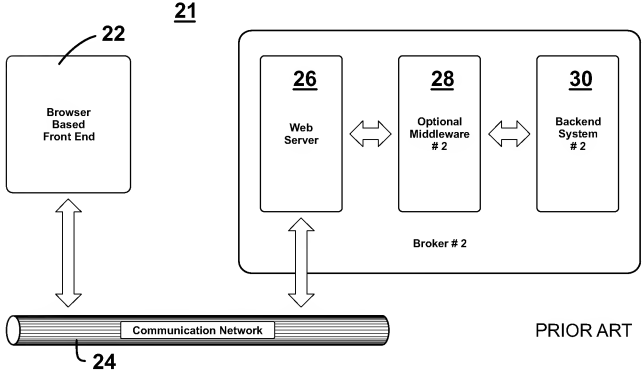

21
22
Browser Based Front End
26
Web Server
28
Optional Middleware # 2
30
Backend System # 2
Broker # 2
Communication Network
24
PRIOR ART

FIG. 2

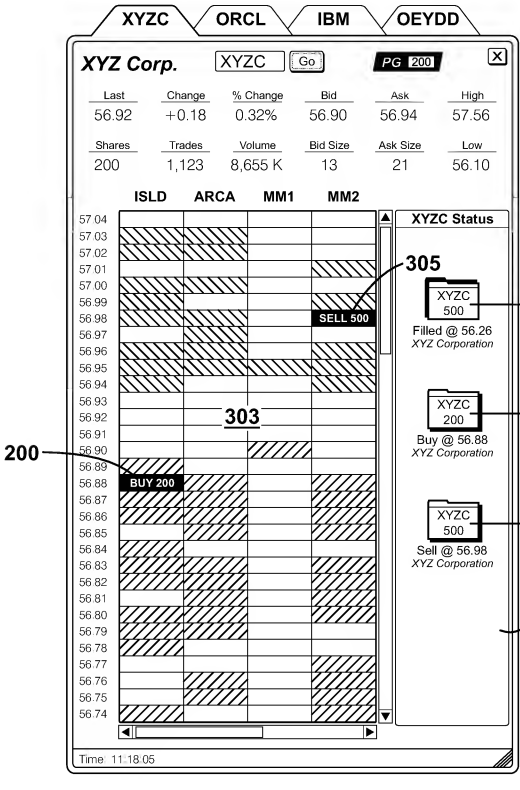

XYZC
ORCL
IBM
OEYDD
XYZ Corp.
XYZC
Go
PG 200
Last
Change
% Change
Bid
Ask
High
56.92
+0.18
0.32%
56.90
56.94
57.56
Shares
Trades
Volume
Bid Size
Ask Size
Low
200
1,123
8,655 K
13
21
56.10
ISLD
ARCA
MM1
MM2
XYZC Status
SELL 500
BUY 200
303
305
200
311
307
309
301
XYZC
500
Filled @ 56.26
XYZ Corporation
XYZC
200
Buy @ 56.88
XYZ Corporation
XYZC
500
Sell @ 56.98
XYZ Corporation
Time: 11:18:05

FIG. 3

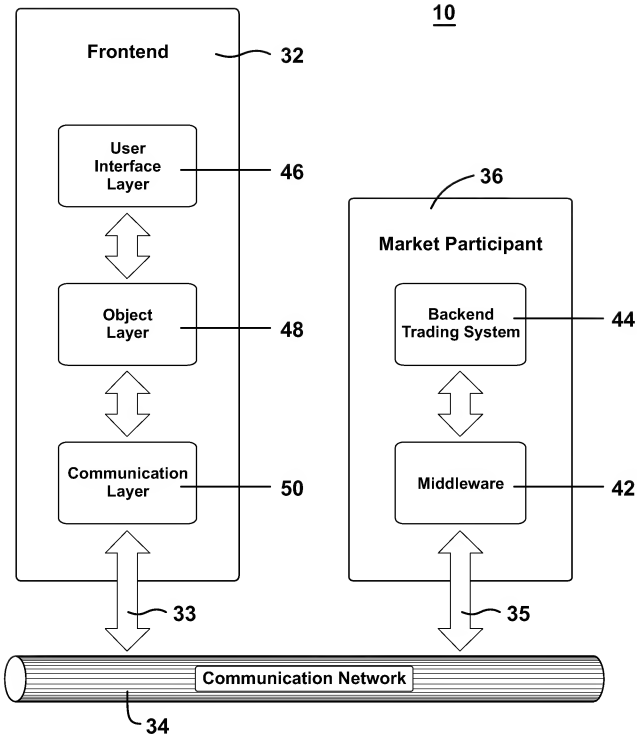

10
Frontend
32
User Interface Layer
46
Object Layer
48
Communication Layer
50
33
36
Market Participant
Backend Trading System
44
Middleware
42
35
Communication Network
34

FIG. 4

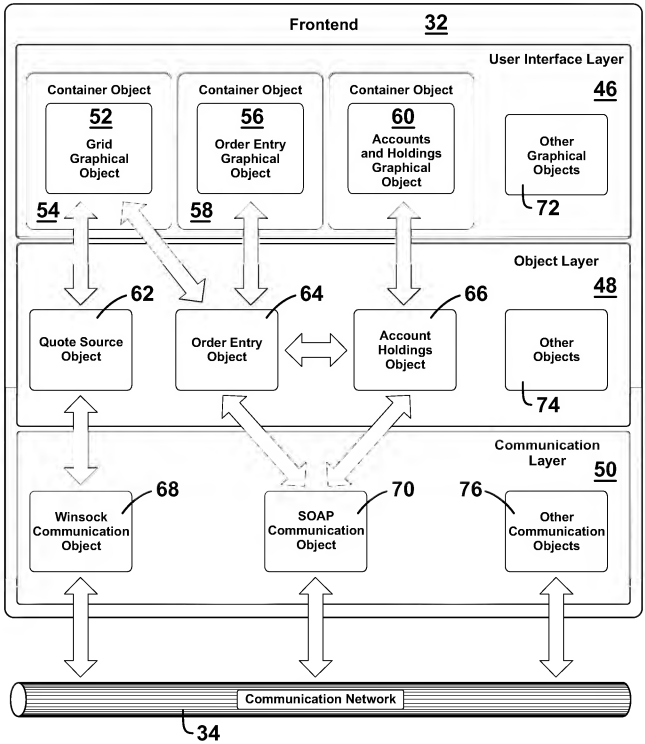

Frontend
32
User Interface Layer
46
Container Object
52
Grid Graphical Object
54
Container Object
56
Order Entry Graphical Object
58
Container Object
60
Accounts and Holdings Graphical Object
Other Graphical Objects
72
Object Layer
48
62
Quote Source Object
64
Order Entry Object
66
Account Holdings Object
Other Objects
74
Communication Layer
50
68
Winsock Communication Object
70
SOAP Communication Object
76
Other Communication Objects
Communication Network
34

FIG. 5

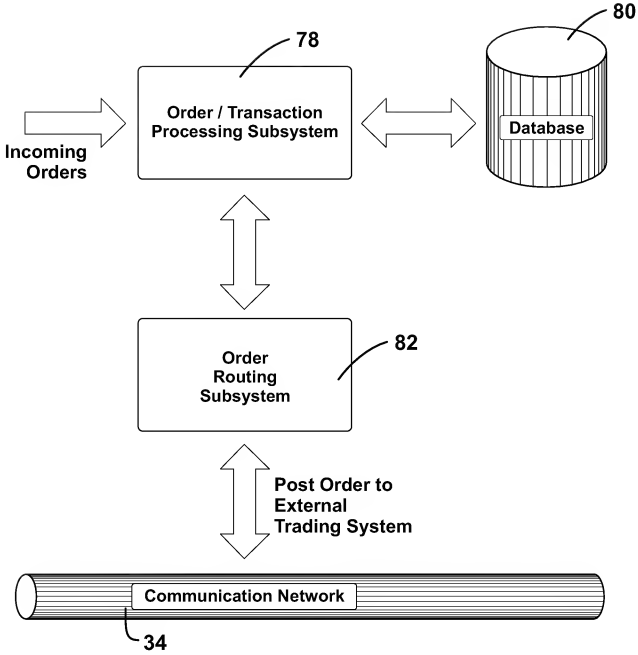

80
78
Order / Transaction
Processing Subsystem
Database
Incoming
Orders
Order
Routing
Subsystem
82
Post Order to
External
Trading System
Communication Network
34

FIG. 6

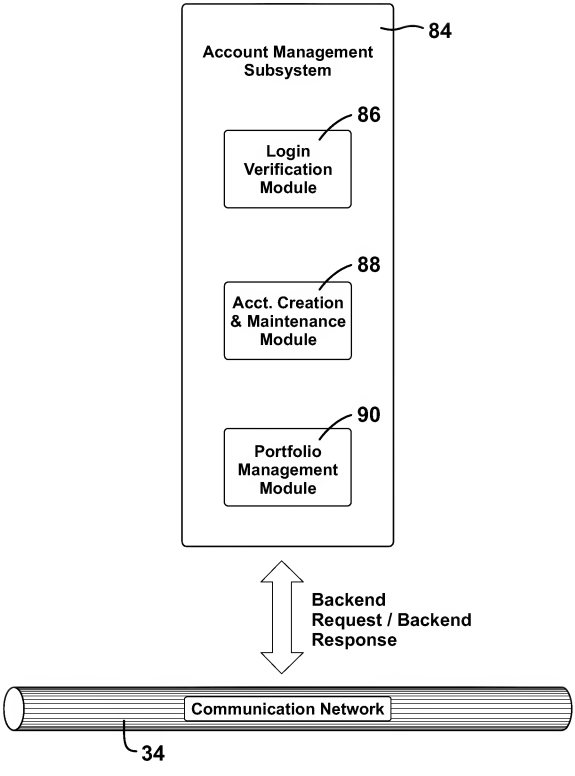

84
Account Management Subsystem
86
Login Verification Module
88
Acct. Creation & Maintenance Module
90
Portfolio Management Module
Backend Request / Backend Response
Communication Network
34

FIG. 7

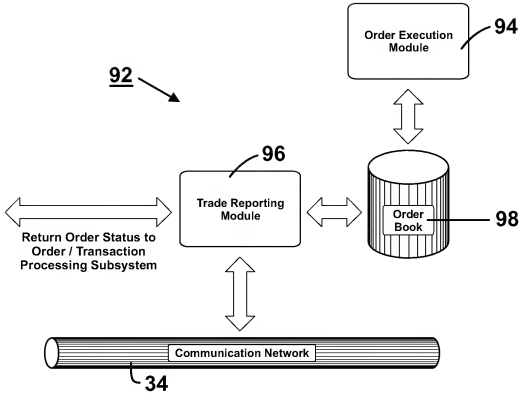

Order Execution Module
94
92
96
Trade Reporting Module
Order Book
98
Return Order Status to Order / Transaction Processing Subsystem
Communication Network
34

FIG. 8

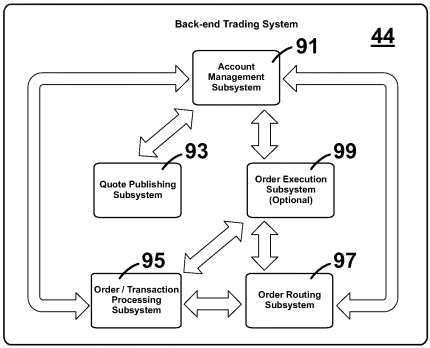

Back-end Trading System
44
91
Account Management Subsystem
93
Quote Publishing Subsystem
99
Order Execution Subsystem (Optional)
95
Order / Transaction Processing Subsystem
97
Order Routing Subsystem

FIG. 9

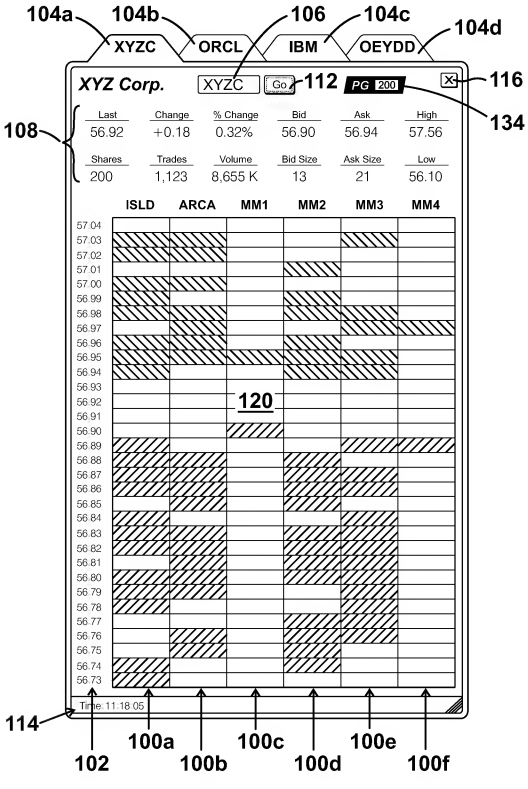

104a
104b
106
104c
104d
XYZC
ORCL
IBM
OEYDD
XYZ Corp.
XYZC
Go
112
PG 200
116
134
108
Last
Change
% Change
Bid
Ask
High
56.92
+0.18
0.32%
56.90
56.94
57.56
Shares
Trades
Volume
Bid Size
Ask Size
Low
200
1,123
8,655 K
13
21
56.10
ISLD
ARCA
MM1
MM2
MM3
MM4
120
Time 11.18.05
114
102
100a
100b
100c
100d
100e
100f

FIG. 10

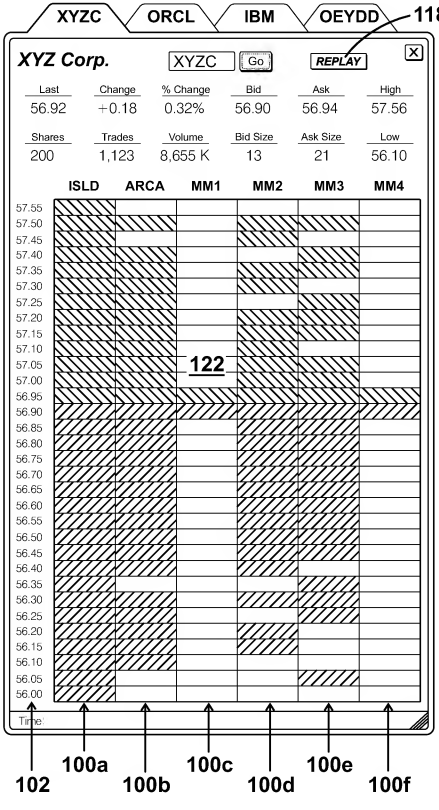

XYZC
ORCL
IBM
OEYDD
118
XYZ Corp.
XYZC
Go
REPLAY
X
Last
Change
% Change
Bid
Ask
High
56.92
+0.18
0.32%
56.90
56.94
57.56
Shares
Trades
Volume
Bid Size
Ask Size
Low
200
1,123
8,655 K
13
21
56.10
ISLD
ARCA
MM1
MM2
MM3
MM4
122
Time:
102
100a
100b
100c
100d
100e
100f

FIG. 11

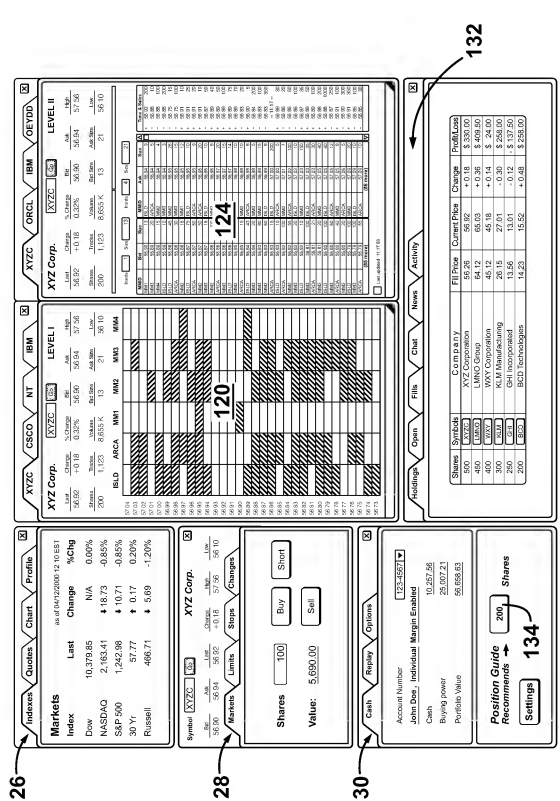

126
128
130
132
134
Indexes
Quotes
Chart
Profile
Markets
Index
Last
Change
%Chg
Dow
10,379.85
N/A
0.00%
NASDAQ
2,163.41
10.73
-0.85%
S&P 500
1,242.98
10.71
-0.85%
30 Yr
57.77
0.17
0.20%
Russell
466.71
5.69
-1.20%
Markets
Limits
Stops
Changes
Shares
100
Buy
Short
Value:
5,690.00
Sell
Cash
Replay
Options
Account Number
123-4567
John Doe , Individual Margin Enabled
Cash
10,257.58
Buying power
25,007.21
Portfolio Value
56,858.63
Position Guide Recommends
200
Shares
Settings
XYZ
CSCO
NT
IBM
XYZ Corp.
LEVEL I
LEVEL II
ISLD
ARCA
NW1
NW2
NW3
NW4
120
124
Holdings
Open
Fills
Chart
News
Activity
Shares
Symbol
Company
Fill Price
Current Price
Change
Profit/Loss
500
XYZ
XYZ Corporation
56.26
56.82
+ 0.18
$ 330.00
460
UNO
UNO Group
64.12
65.03
+ 0.36
$ 409.80
1,000
ABC
ABC Corporation
45.17
45.03
- 0.18
$ -140.00
300
KLM
KLM Manufacturing
26.15
27.15
+ 0.30
$ 258.00
250
GHI
GHI Incorporated
13.56
13.01
- 0.12
$ -137.50
200
BCD
BCD Technologies
14.23
15.52
+ 0.48
$ 258.00

FIG. 12

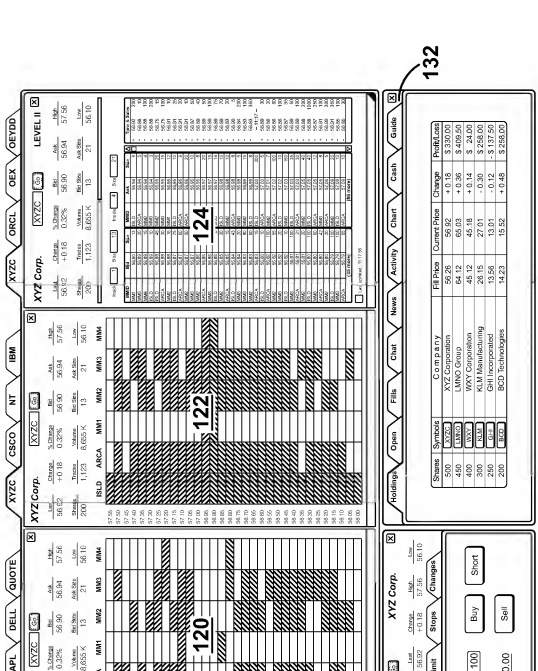

XYZC
AAPL
DELL
QUOTE
XYZC
CSCO
NT
IBM
XYZC
ORCL
OEX
QEYDP
XYZ Corp.
XYZC
GS
Last
56.92
Change
+0.18
% Change
0.32%
Bid
56.90
Ask
56.94
High
57.56
Shares
200
Trades
1,123
Volume
6,655 K
Ask Size
13
Bid Size
21
Low
56.10
ISLD
ARCA
NW1
NW2
NW3
NW4
120
122
124
Symbol
XYZC
GS
Bid
56.90
Last
56.92
Change
+0.18
High
57.56
Low
56.10
Market
Limit
Stops
Trailing
Shares
100
Buy
Short
Value:
5,690.00
Sell
Holdings
Open
Fills
Chart
News
Activity
Chart
Cash
Guide
Shares
Symbol
Company
Fill Price
Current Price
Change
Profit/Loss
200
XYZC
XYZ Corporation
56.25
56.92
+ 0.18
$ 134.00
500
LMNO
LMNO Corporation
89.12
90.02
+ 0.18
$ 450.00
400
WXY
WXY Corporation
45.12
45.18
+ 0.14
$ 24.00
300
KLM
KLM Manufacturing
28.15
27.01
- 0.30
$ 258.00
280
GHI
GHI Incorporated
13.56
13.01
- 0.12
$ 137.91
200
SYQ
SYQ Technologies
14.23
15.92
+ 0.48
$ 1,698.00
LEVEL II
Ask
56.94
Bid
56.90
Ask Size
21
Bid Size
13
Low
56.10
High
57.56
Volume
6,655 K
Trades
1,123
Shares
200
128
132

FIG. 13

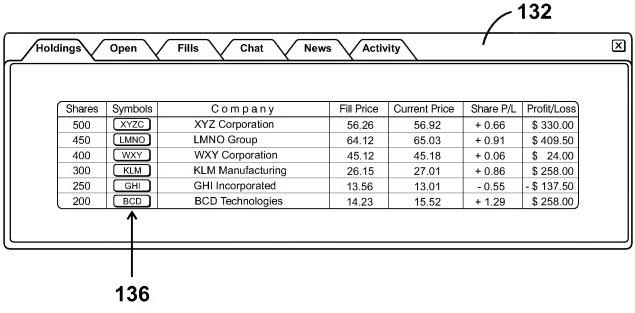

132
Holdings
Open
Fills
Chat
News
Activity
Shares
Symbols
Company
Fill Price
Current Price
Share P/L
Profit/Loss
500 XYZC XYZ Corporation 56.26 56.92 + 0.66 $ 330.00
450 LMNO LMNO Group 64.12 65.03 + 0.91 $ 409.50
400 WXY WXY Corporation 45.12 45.18 + 0.06 $ 24.00
300 KLM KLM Manufacturing 26.15 27.01 + 0.86 $ 258.00
250 GHI GHI Incorporated 13.56 13.01 - 0.55 - $ 137.50
200 BCD BCD Technologies 14.23 15.52 + 1.29 $ 258.00
136

FIG. 14

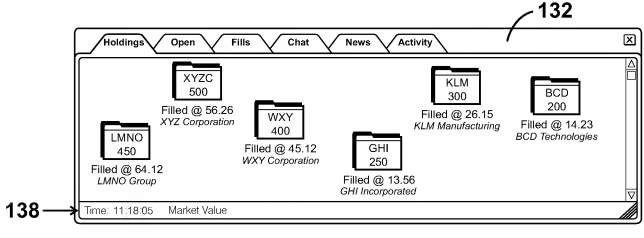

132
Holdings
Open
Fills
Chat
News
Activity
XYZC 500
Filled @ 56.26
XYZ Corporation
LMNO 450
Filled @ 64.12
LMNO Group
WXY 400
Filled @ 45.12
WXY Corporation
GHI 250
Filled @ 13.56
GHI Incorporated
KLM 300
Filled @ 26.15
KLM Manufacturing
BCD 200
Filled @ 14.23
BCD Technologies
138
Time: 11:18:05 Market Value

FIG. 15

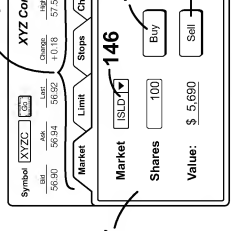


FIG. 16

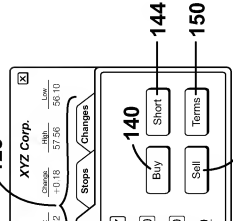


FIG. 17

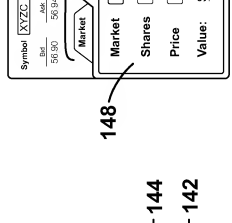


FIG. 18

FIG. 19

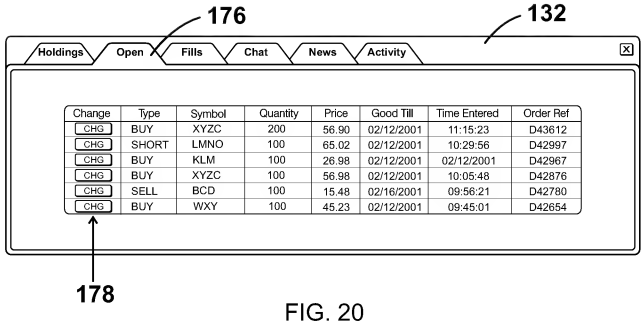

176
132
Holdings
Open
Fills
Chat
News
Activity
Change
Type
Symbol
Quantity
Price
Good Till
Time Entered
Order Ref
CHG BUY XYZC 200 56.90 02/12/2001 11:15:23 D43612
CHG SHORT LMNO 100 65.02 02/12/2001 10:29:56 D42997
CHG BUY KLM 100 26.98 02/12/2001 02/12/2001 D42967
CHG BUY XYZC 100 56.98 02/12/2001 10:05:48 D42876
CHG SELL BCD 100 15.48 02/16/2001 09:56:21 D42780
CHG BUY WXY 100 45.23 02/12/2001 09:45:01 D42654
178

FIG. 20

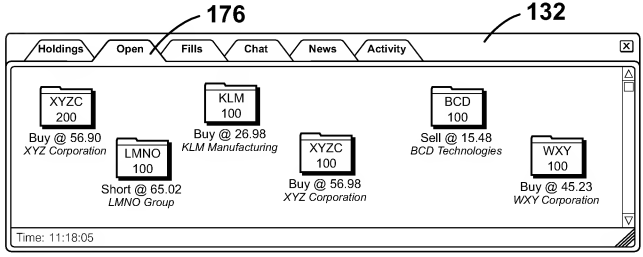

176
132
Holdings
Open
Fills
Chat
News
Activity
XYZC 200
Buy @ 56.90
XYZ Corporation
LMNO 100
Short @ 65.02
LMNO Group
KLM 100
Buy @ 26.98
KLM Manufacturing
XYZC 100
Buy @ 56.98
XYZ Corporation
BCD 100
Sell @ 15.48
BCD Technologies
WXY 100
Buy @ 45.23
WXY Corporation
Time: 11:18:05

FIG. 21

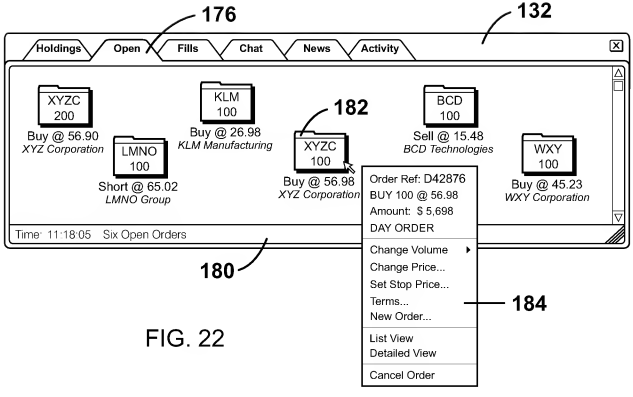
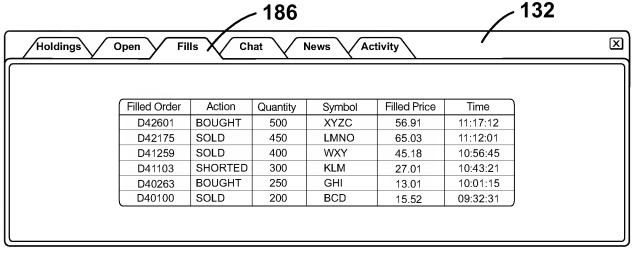


FIG. 22



Filled Order	Action	Quantity	Symbol	Filled Price	Time
D42601	BOUGHT	500	XYZC	56.91	11:17:12
D42175	SOLD	450	LMNO	65.03	11:12:01
D41259	SOLD	400	WXY	45.18	10:56:45
D41103	SHORTED	300	KLM	27.01	10:43:21
D40263	BOUGHT	250	GHI	13.01	10:01:15
D40100	SOLD	200	BCD	15.52	09:32:31

FIG. 23

FIG. 24

FIG. 39

FIG. 40

FIG. 43

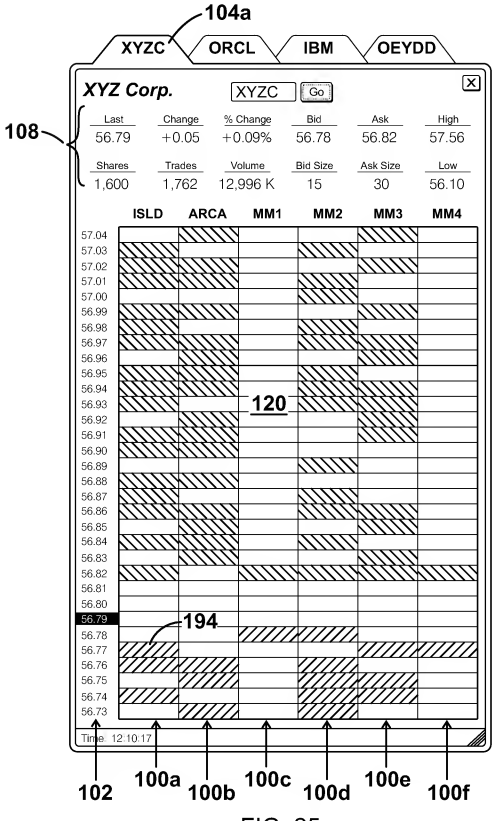

104a
XYZC
ORCL
IBM
OEYDD
XYZ Corp.
XYZC
Go
108
Last
56.79
Change
+0.05
% Change
+0.09%
Bid
56.78
Ask
56.82
High
57.56
Shares
1,600
Trades
1,762
Volume
12,996 K
Bid Size
15
Ask Size
30
Low
56.10
ISLD
ARCA
MM1
MM2
MM3
MM4
120
194
Time 12:10:17
102
100a
100b
100c
100d
100e
100f

FIG. 25

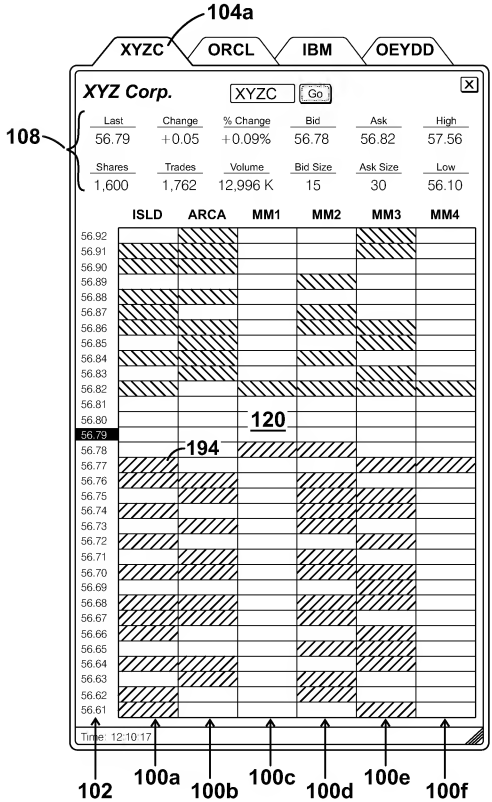

104a
XYZC
ORCL
IBM
OEYDD
XYZ Corp.
XYZC
Go
108
Last
56.79
Change
+0.05
% Change
+0.09%
Bid
56.78
Ask
56.82
High
57.56
Shares
1,600
Trades
1,762
Volume
12,996 K
Bid Size
15
Ask Size
30
Low
56.10
ISLD
ARCA
MM1
MM2
MM3
MM4
120
194
Time 12:10:17
102
100a
100b
100c
100d
100e
100f

FIG. 26

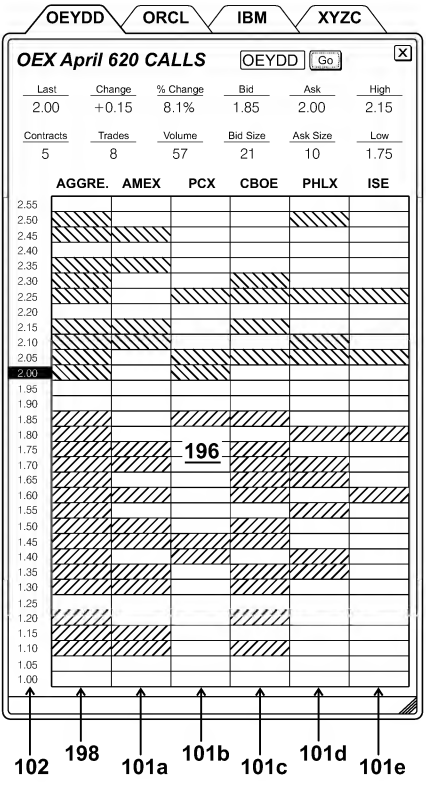

OEYDD
ORCL
IBM
XYZC
OEX April 620 CALLS
OEYDD
Go
Last
2.00
Change
+0.15
% Change
8.1%
Bid
1.85
Ask
2.00
High
2.15
Contracts
5
Trades
8
Volume
57
Bid Size
21
Ask Size
10
Low
1.75
AGGRE.
AMEX
PCX
CBOE
PHLX
ISE
2.55
2.50
2.45
2.40
2.35
2.30
2.25
2.20
2.15
2.10
2.05
2.00
1.95
1.90
1.85
1.80
1.75
1.70
1.65
1.60
1.55
1.50
1.45
1.40
1.35
1.30
1.25
1.20
1.15
1.10
1.05
1.00
196
102
198
101a
101b
101c
101d
101e

FIG. 27

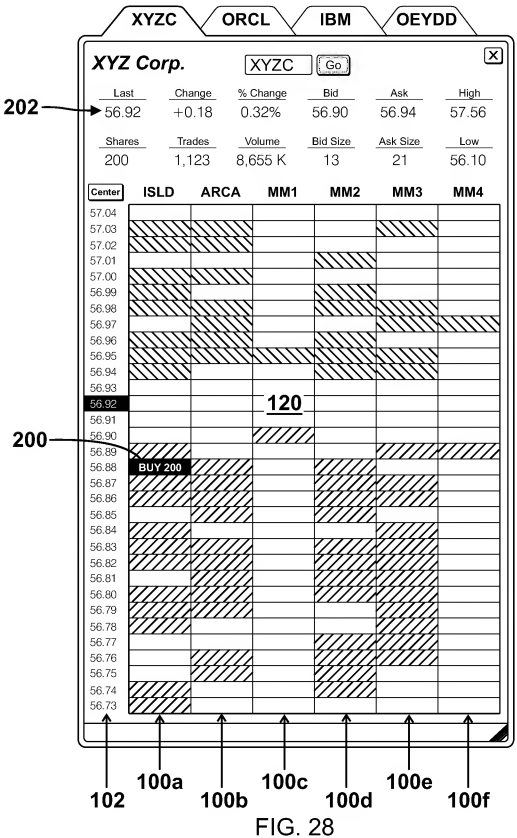

XYZC
ORCL
IBM
OEYDD
XYZ Corp.
XYZC
Go
202
Last
56.92
Change
+0.18
% Change
0.32%
Bid
56.90
Ask
56.94
High
57.56
Shares
200
Trades
1,123
Volume
8,655 K
Bid Size
13
Ask Size
21
Low
56.10
Center
ISLD
ARCA
MM1
MM2
MM3
MM4
120
200
BUY 200
102
100a
100b
100c
100d
100e
100f

FIG. 28

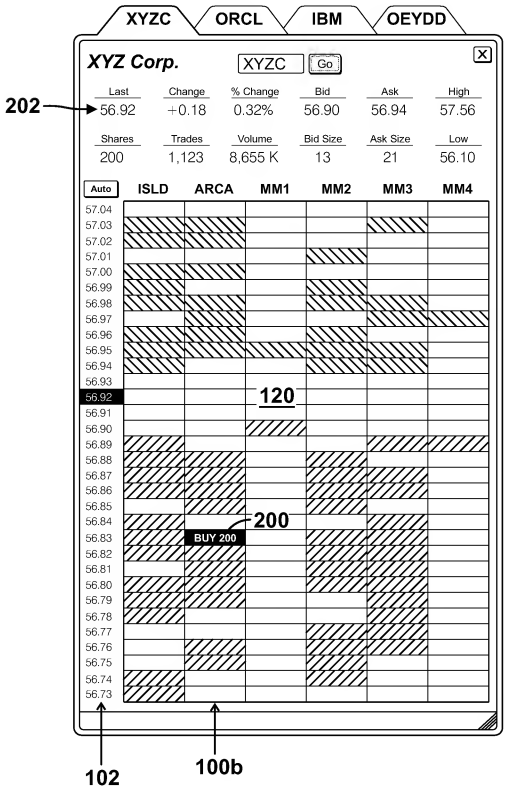

XYZC
ORCL
IBM
OEYDD
XYZ Corp.
XYZC
Go
202
Last
Change
% Change
Bid
Ask
High
56.92
+0.18
0.32%
56.90
56.94
57.56
Shares
Trades
Volume
Bid Size
Ask Size
Low
200
1,123
8,655 K
13
21
56.10
Auto
ISLD
ARCA
MM1
MM2
MM3
MM4
120
200
BUY 200
102
100b

FIG. 29

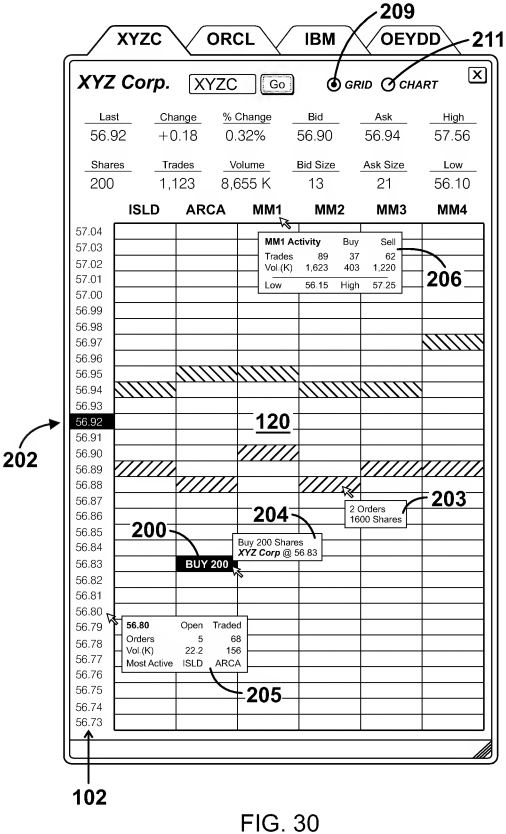

209
XYZC
ORCL
IBM
OEYDD
211
XYZ Corp.
XYZC
Go
GRID
CHART
Last
Change
% Change
Bid
Ask
High
56.92
+0.18
0.32%
56.90
56.94
57.56
Shares
Trades
Volume
Bid Size
Ask Size
Low
200
1,123
8,655 K
13
21
56.10
ISLD
ARCA
MM1
MM2
MM3
MM4
MM1 Activity
Buy
Sell
Trades
89
37
62
Vol.(K)
1,623
403
1,220
Low
56.15
High
57.25
206
120
202
2 Orders
1600 Shares
203
204
200
Buy 200 Shares
XYZ Corp @ 56.83
BUY 200
56.80
Open
Traded
Orders
5
68
Vol.(K)
22.2
156
Most Active
ISLD
ARCA
205
102

FIG. 30

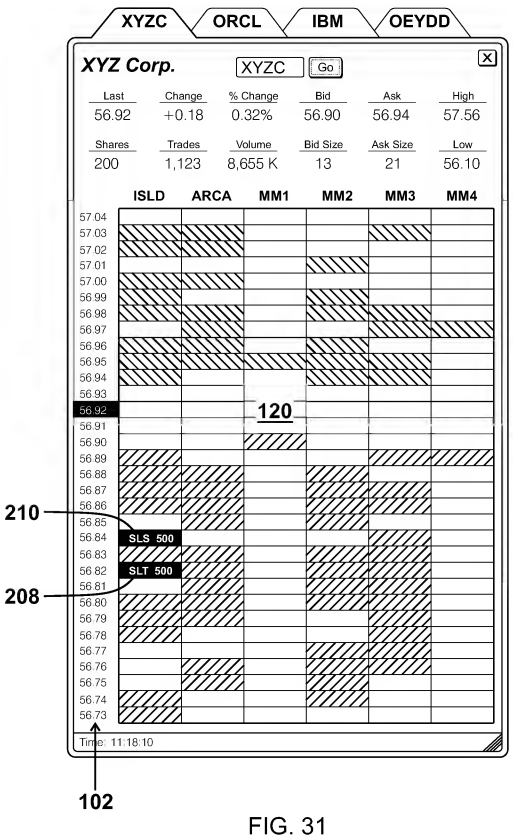

XYZC
ORCL
IBM
OEYDD
XYZ Corp.
XYZC
Go
Last
Change
% Change
Bid
Ask
High
56.92
+0.18
0.32%
56.90
56.94
57.56
Shares
Trades
Volume
Bid Size
Ask Size
Low
200
1,123
8,655 K
13
21
56.10
ISLD
ARCA
MM1
MM2
MM3
MM4
120
SLS 500
SLT 500
210
208
102
Time: 11:18:10

FIG. 31

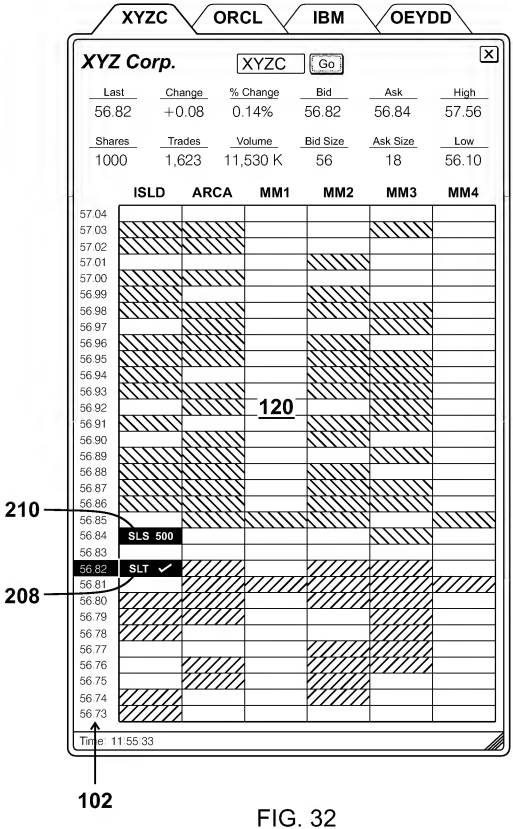

XYZC
ORCL
IBM
OEYDD
XYZ Corp.
XYZC
Go
Last
Change
% Change
Bid
Ask
High
56.82
+0.08
0.14%
56.82
56.84
57.56
Shares
Trades
Volume
Bid Size
Ask Size
Low
1000
1,623
11,530 K
56
18
56.10
ISLD
ARCA
MM1
MM2
MM3
MM4
120
SLS 500
SLT
Time: 11:55:33
210
208
102

FIG. 32

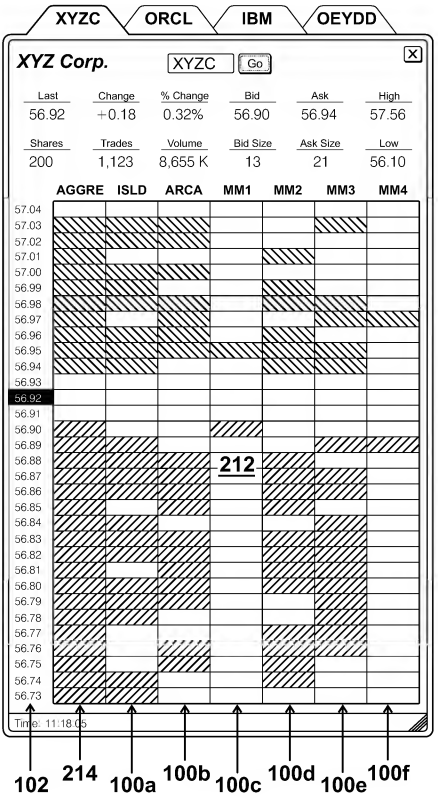

XYZC
ORCL
IBM
OEYDD
XYZ Corp.
XYZC
Go
Last
Change
% Change
Bid
Ask
High
56.92
+0.18
0.32%
56.90
56.94
57.56
Shares
Trades
Volume
Bid Size
Ask Size
Low
200
1,123
8,655 K
13
21
56.10
AGGRE
ISLD
ARCA
MM1
MM2
MM3
MM4
212
Time: 11:18:05
102
214
100a
100b
100c
100d
100e
100f

FIG. 33

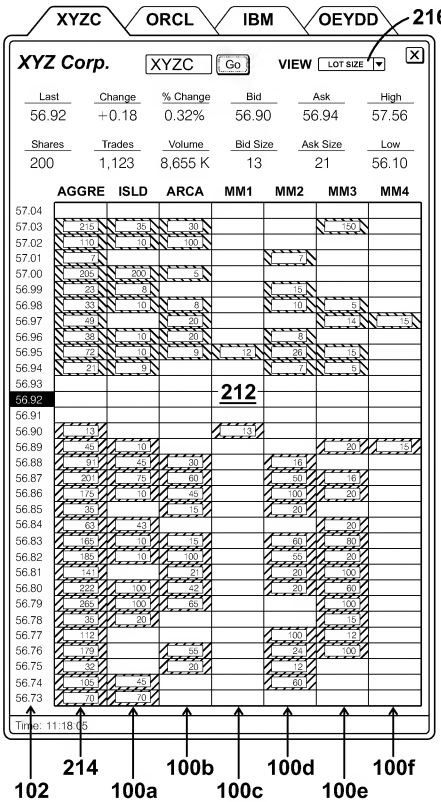

XYZC
ORCL
IBM
OEYDD
216
XYZ Corp.
XYZC
Go
VIEW
LOT SIZE
Last
56.92
Change
+0.18
% Change
0.32%
Bid
56.90
Ask
56.94
High
57.56
Shares
200
Trades
1,123
Volume
8,655 K
Bid Size
13
Ask Size
21
Low
56.10
AGGRE
ISLD
ARCA
MM1
MM2
MM3
MM4
212
Time: 11:18:05
102
214
100a
100b
100c
100d
100e
100f

FIG. 34

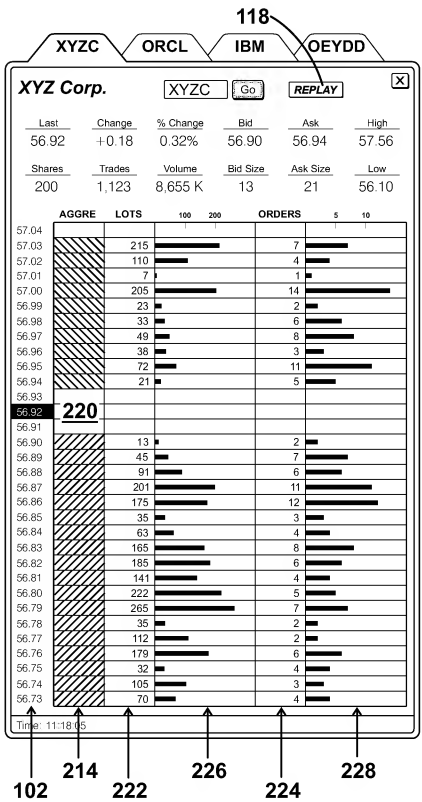

118
XYZC
ORCL
IBM
OEYDD
XYZ Corp.
XYZC
Go
REPLAY
Last
56.92
Change
+0.18
% Change
0.32%
Bid
56.90
Ask
56.94
High
57.56
Shares
200
Trades
1,123
Volume
8,655 K
Bid Size
13
Ask Size
21
Low
56.10
AGGRE
LOTS
100
200
ORDERS
5
10
57.04
57.03 215 7
57.02 110 4
57.01 7 1
57.00 205 14
56.99 23 2
56.98 33 6
56.97 49 8
56.96 38 3
56.95 72 11
56.94 21 5
56.93
56.92 220
56.91
56.90 13 2
56.89 45 7
56.88 91 6
56.87 201 11
56.86 175 12
56.85 35 3
56.84 63 4
56.83 165 8
56.82 185 6
56.81 141 4
56.80 222 5
56.79 265 7
56.78 35 2
56.77 112 2
56.76 179 6
56.75 32 4
56.74 105 3
56.73 70 4
Time: 11:18:05
102
214
222
226
224
228

FIG. 35

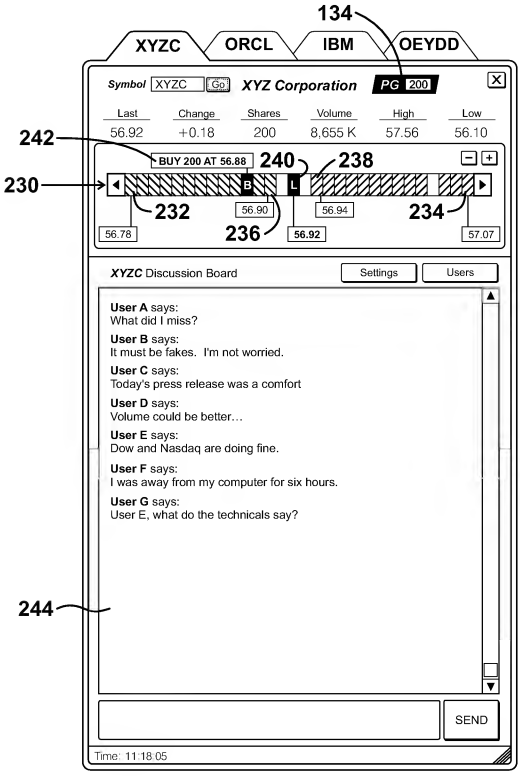

134
XYZC
ORCL
IBM
OEYDD
Symbol XYZC Go
XYZ Corporation
PG 200
Last
Change
Shares
Volume
High
Low
56.92
+0.18
200
8,655 K
57.56
56.10
242
BUY 200 AT 56.88
240
238
230
B
L
232
56.90
56.94
234
56.78
236
56.92
57.07
XYZC Discussion Board
Settings
Users
User A says:
What did I miss?
User B says:
It must be fakes. I'm not worried.
User C says:
Today's press release was a comfort
User D says:
Volume could be better…
User E says:
Dow and Nasdaq are doing fine.
User F says:
I was away from my computer for six hours.
User G says:
User E, what do the technicals say?
244
SEND
Time: 11:18:05

FIG. 36

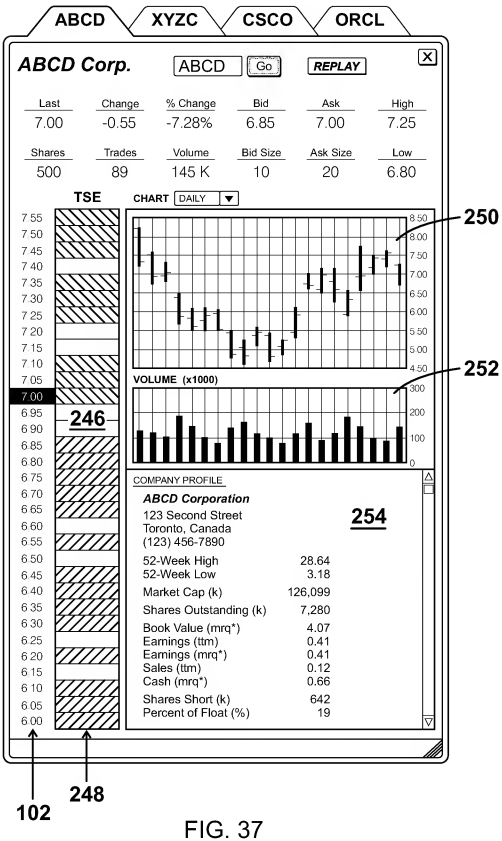

ABCD
XYZC
CSCO
ORCL
ABCD Corp.
ABCD
Go
REPLAY
Last
Change
% Change
Bid
Ask
High
7.00
-0.55
-7.28%
6.85
7.00
7.25
Shares
Trades
Volume
Bid Size
Ask Size
Low
500
89
145 K
10
20
6.80
TSE
CHART
DAILY
250
252
VOLUME (x1000)
246
COMPANY PROFILE
ABCD Corporation
123 Second Street
Toronto, Canada
(123) 456-7890
254
52-Week High 28.64
52-Week Low 3.18
Market Cap (k) 126,099
Shares Outstanding (k) 7,280
Book Value (mrq*) 4.07
Earnings (ttm) 0.41
Earnings (mrq*) 0.41
Sales (ttm) 0.12
Cash (mrq*) 0.66
Shares Short (k) 642
Percent of Float (%) 19
102
248

FIG. 37

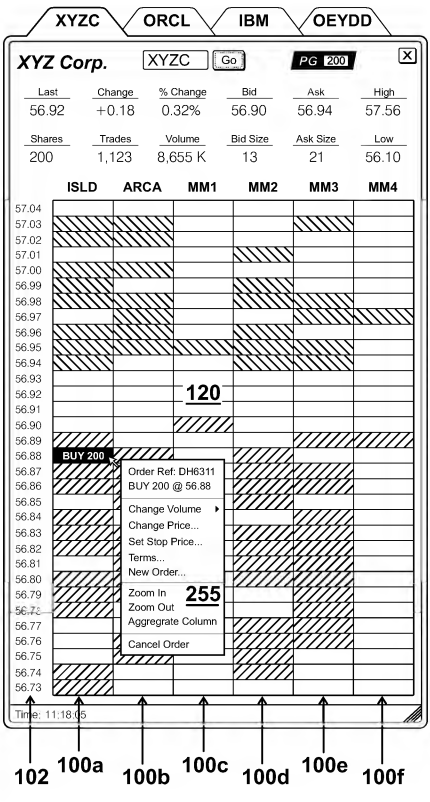

XYZC
ORCL
IBM
OEYDD
XYZ Corp.
XYZC
Go
PG 200
Last
56.92
Change
+0.18
% Change
0.32%
Bid
56.90
Ask
56.94
High
57.56
Shares
200
Trades
1,123
Volume
8,655 K
Bid Size
13
Ask Size
21
Low
56.10
ISLD
ARCA
MM1
MM2
MM3
MM4
120
BUY 200
Order Ref: DH6311
BUY 200 @ 56.88
Change Volume
Change Price...
Set Stop Price...
Terms...
New Order...
Zoom In
Zoom Out
Aggregrate Column
255
Cancel Order
Time: 11:18:05
102
100a
100b
100c
100d
100e
100f

FIG. 38

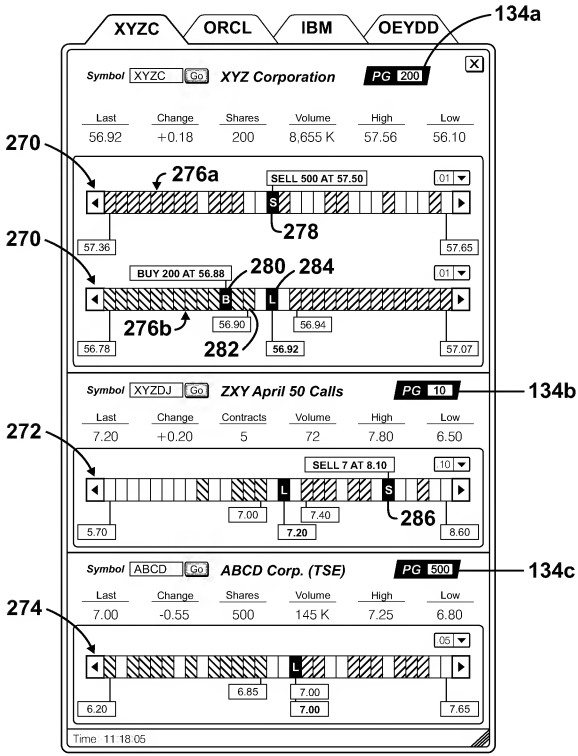

XYZC
ORCL
IBM
OEYDD
134a
Symbol XYZC Go XYZ Corporation PG 200
Last Change Shares Volume High Low
56.92 +0.18 200 8,655 K 57.56 56.10
270
276a
SELL 500 AT 57.50
.01
S
278
57.36
57.65
270
BUY 200 AT 56.88
280
284
.01
B
L
276b
56.90
56.94
282
56.78
56.92
57.07
Symbol XYZDJ Go ZXY April 50 Calls PG 10
134b
Last Change Contracts Volume High Low
7.20 +0.20 5 72 7.80 6.50
272
SELL 7 AT 8.10
10
L
S
7.00
7.40
286
5.70
7.20
8.60
Symbol ABCD Go ABCD Corp. (TSE) PG 500
134c
Last Change Shares Volume High Low
7.00 -0.55 500 145 K 7.25 6.80
274
.05
L
6.85
7.00
6.20
7.00
7.65
Time 11:18:05

FIG. 41

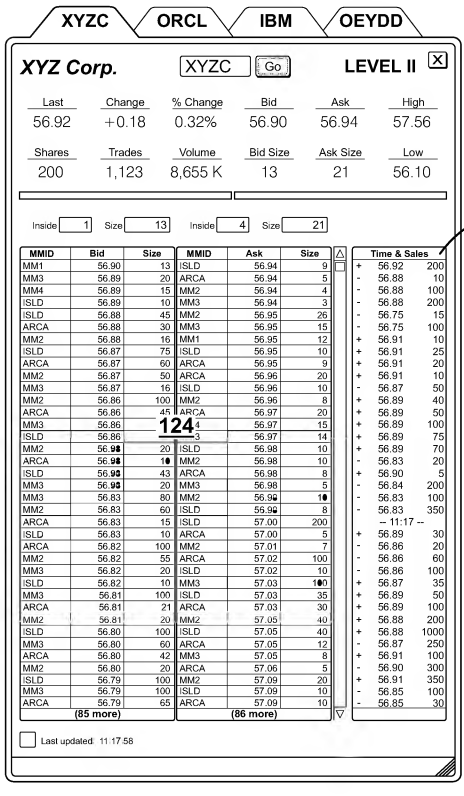

XYZC
ORCL
IBM
OEYDD
XYZ Corp.
XYZC
Go
LEVEL II
Last
56.92
Change
+0.18
% Change
0.32%
Bid
56.90
Ask
56.94
High
57.56
Shares
200
Trades
1,123
Volume
8,655 K
Bid Size
13
Ask Size
21
Low
56.10
Inside 1 Size 13
Inside 4 Size 21
290
MMID Bid Size
MM1 56.90 13
MM3 56.89 20
MM4 56.89 15
ISLD 56.89 10
ISLD 56.88 45
ARCA 56.88 30
MM2 56.88 16
ISLD 56.87 75
ARCA 56.87 60
MM2 56.87 50
MM3 56.87 16
MM2 56.86 100
ARCA 56.86 45
MM3 56.86 4
ISLD 56.86 3
MM2 56.98 20
ARCA 56.98 10
ISLD 56.98 43
MM3 56.98 20
MM3 56.83 80
MM2 56.83 60
ARCA 56.83 15
ISLD 56.83 10
ARCA 56.82 100
MM2 56.82 55
MM3 56.82 20
ISLD 56.82 10
MM3 56.81 100
ARCA 56.81 21
MM2 56.81 20
ISLD 56.80 100
MM3 56.80 60
ARCA 56.80 42
MM2 56.80 20
ISLD 56.79 100
MM3 56.79 100
ARCA 56.79 65
(85 more)
MMID Ask Size
ISLD 56.94 9
ARCA 56.94 5
MM2 56.94 4
MM3 56.94 3
MM2 56.95 26
MM3 56.95 15
MM1 56.95 12
ISLD 56.95 10
ARCA 56.95 9
ARCA 56.96 20
ISLD 56.96 10
MM2 56.96 8
ARCA 56.97 20
MM4 56.97 15
MM3 56.97 14
ISLD 56.98 10
MM2 56.98 10
ARCA 56.98 8
MM3 56.98 5
MM2 56.99 5
ISLD 56.99 8
ISLD 57.00 200
ARCA 57.00 5
MM2 57.01 7
ARCA 57.02 100
ISLD 57.02 10
MM3 57.03 10
ISLD 57.03 35
ARCA 57.03 30
MM2 57.05 40
ISLD 57.05 40
ARCA 57.05 12
MM3 57.05 8
ARCA 57.06 5
MM2 57.09 20
ISLD 57.09 10
ARCA 57.09 10
(86 more)
Time & Sales
+ 56.92 200
- 56.88 10
- 56.88 100
- 56.88 200
- 56.75 15
- 56.75 100
+ 56.91 10
+ 56.91 25
+ 56.91 20
+ 56.91 10
- 56.87 50
+ 56.89 40
+ 56.89 50
+ 56.89 100
+ 56.89 75
+ 56.89 70
- 56.83 20
+ 56.90 5
+ 56.84 200
- 56.83 100
- 56.83 350
-- 11:17 --
+ 56.89 30
- 56.86 20
- 56.86 60
- 56.86 100
+ 56.87 35
+ 56.89 50
+ 56.89 100
+ 56.88 200
+ 56.88 1000
- 56.87 250
+ 56.91 100
- 56.90 300
+ 56.91 350
- 56.85 100
- 56.85 30
Last updated: 11:17:58

FIG. 42

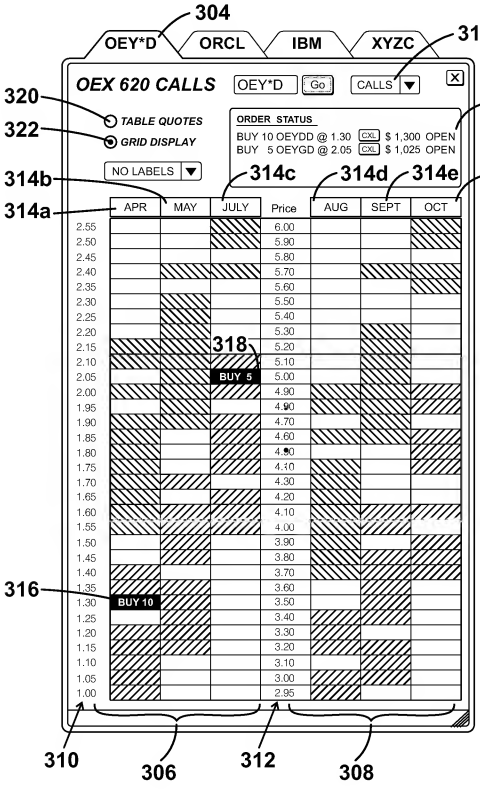

304
OEY*D
ORCL
IBM
XYZC
319
OEX 620 CALLS
OEY*D
Go
CALLS
X
320
TABLE QUOTES
322
GRID DISPLAY
ORDER STATUS
BUY 10 OEYDD @ 1.30 CXL $ 1,300 OPEN
BUY 5 OEYGD @ 2.05 CXL $ 1,025 OPEN
321
NO LABELS
314b
314a
314c
314d
314e
314f
APR
MAY
JULY
Price
AUG
SEPT
OCT
318
BUY 5
316
BUY 10
310
306
312
308

FIG. 44

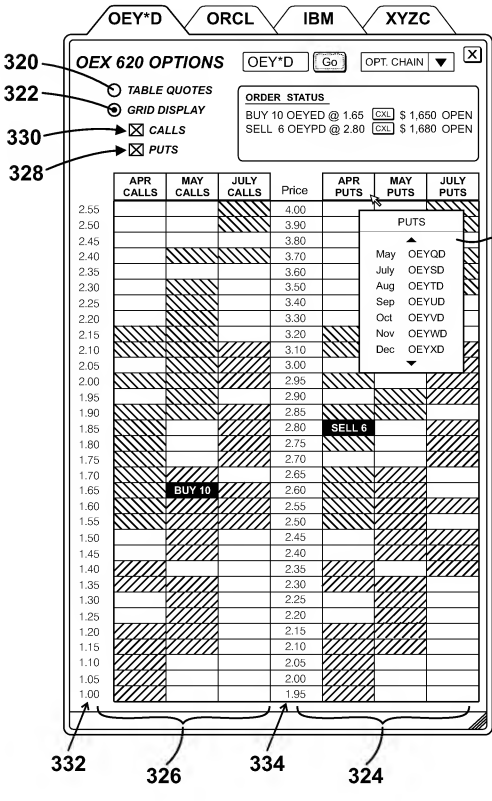

OEY*D
ORCL
IBM
XYZC
OEX 620 OPTIONS
OEY*D
Go
OPT. CHAIN
320
TABLE QUOTES
322
GRID DISPLAY
330
CALLS
328
PUTS
ORDER STATUS
BUY 10 OEYED @ 1.65 CXL $ 1,650 OPEN
SELL 6 OEYPD @ 2.80 CXL $ 1,680 OPEN
APR CALLS
MAY CALLS
JULY CALLS
Price
APR PUTS
MAY PUTS
JULY PUTS
PUTS
May OEYQD
July OEYSD
Aug OEYTD
Sep OEYUD
Oct OEYVD
Nov OEYWD
Dec OEYXD
336
SELL 6
BUY 10
332
326
334
324

FIG. 45

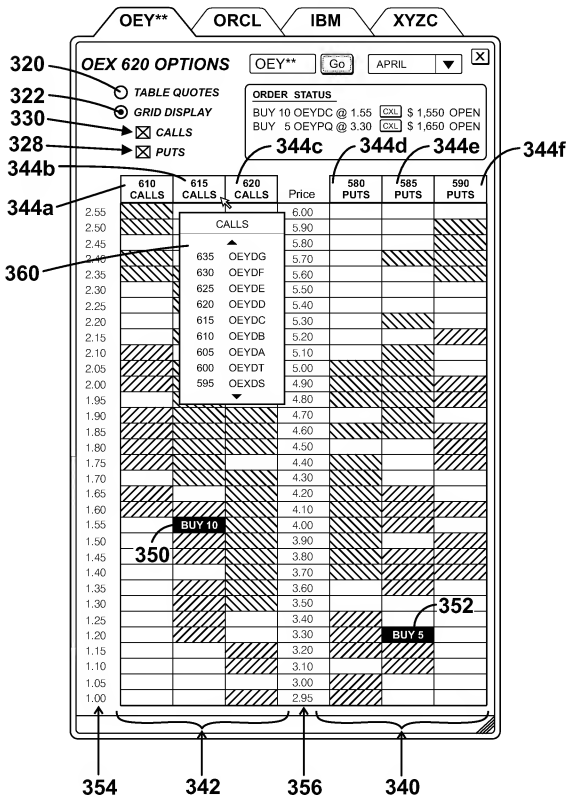

OEY**
ORCL
IBM
XYZC
OEX 620 OPTIONS
OEY**
Go
APRIL
TABLE QUOTES
GRID DISPLAY
CALLS
PUTS
ORDER STATUS
BUY 10 OEYDC @ 1.55 CXL $ 1,550 OPEN
BUY 5 OEYPQ @ 3.30 CXL $ 1,650 OPEN
610 CALLS
615 CALLS
620 CALLS
Price
580 PUTS
585 PUTS
590 PUTS
CALLS
635 OEYDG
630 OEYDF
625 OEYDE
620 OEYDD
615 OEYDC
610 OEYDB
605 OEYDA
600 OEYDT
595 OEXDS
BUY 10
BUY 5
320
322
330
328
344b
344a
360
344c
344d
344e
344f
350
352
354
342
356
340

FIG. 46

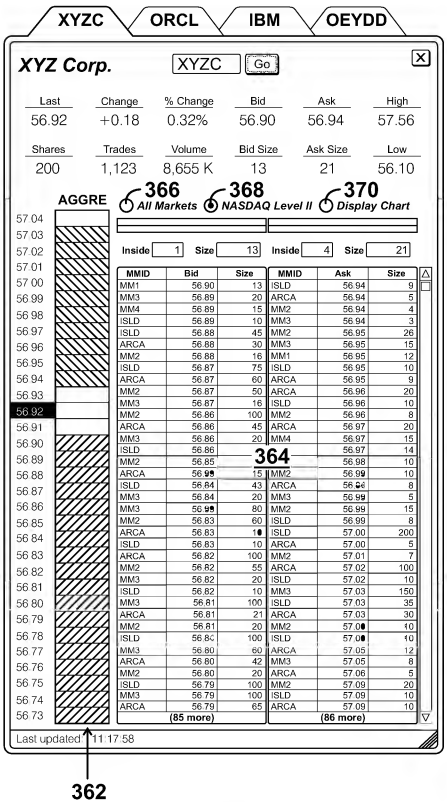

XYZC
ORCL
IBM
OEYDD
XYZ Corp.
XYZC
Go
Last
56.92
Change
+0.18
% Change
0.32%
Bid
56.90
Ask
56.94
High
57.56
Shares
200
Trades
1,123
Volume
8,655 K
Bid Size
13
Ask Size
21
Low
56.10
AGGRE
366
All Markets
368
NASDAQ Level II
370
Display Chart
Inside 1
Size 13
Inside 4
Size 21
MMID
Bid
Size
MMID
Ask
Size
MM1 56.90 13 ISLD 56.94 9
MM3 56.89 20 ARCA 56.94 5
MM4 56.89 15 MM2 56.94 4
ISLD 56.89 10 MM3 56.94 3
ISLD 56.88 45 MM2 56.95 26
ARCA 56.88 30 MM3 56.95 15
MM2 56.88 16 MM1 56.95 12
ISLD 56.87 75 ISLD 56.95 10
ARCA 56.87 60 ARCA 56.95 9
MM2 56.87 50 ARCA 56.96 20
MM3 56.87 16 ISLD 56.96 10
MM2 56.86 100 MM2 56.96 8
ARCA 56.86 45 ARCA 56.97 20
MM3 56.86 20 MM4 56.97 15
ISLD 56.86 56.97 14
MM2 56.85 56.98 10
ARCA 56.84 15 MM2 56.99 10
ISLD 56.84 43 ARCA 56.99 8
MM3 56.84 20 MM3 56.99 5
MM3 56.83 80 MM2 56.99 15
MM2 56.83 60 ISLD 56.99 8
ARCA 56.83 10 ISLD 57.00 200
ISLD 56.83 10 ARCA 57.00 5
ARCA 56.82 100 MM2 57.01 7
MM2 56.82 55 ARCA 57.02 100
MM3 56.82 20 ISLD 57.02 10
ISLD 56.82 10 MM3 57.03 150
MM3 56.81 100 ISLD 57.03 35
ARCA 56.81 21 ARCA 57.03 30
MM2 56.81 20 MM2 57.08 10
ISLD 56.80 100 ISLD 57.08 10
MM3 56.80 60 ARCA 57.05 12
ARCA 56.80 42 MM3 57.05 8
MM2 56.80 20 ARCA 57.06 5
ISLD 56.79 100 MM2 57.09 20
MM3 56.79 100 ISLD 57.09 10
ARCA 56.79 65 ARCA 57.09 10
(85 more)
(86 more)
364
Last updated 11 17 58
362

FIG. 47

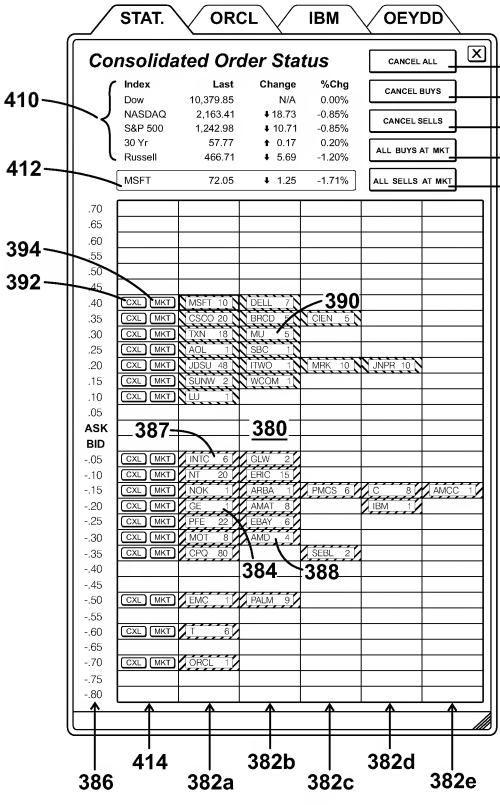

STAT.
ORCL
IBM
OEYDD
Consolidated Order Status
CANCEL ALL
CANCEL BUYS
CANCEL SELLS
ALL BUYS AT MKT
ALL SELLS AT MKT
400
402
404
406
408
410
412
Index Last Change %Chg
Dow 10,379.85 N/A 0.00%
NASDAQ 2,163.41 18.73 -0.85%
S&P 500 1,242.98 10.71 -0.85%
30 Yr 57.77 0.17 0.20%
Russell 466.71 5.69 -1.20%
MSFT 72.05 1.25 -1.71%
394
392
390
387
380
384
388
ASK
BID
386
414
382a
382b
382c
382d
382e

FIG. 48

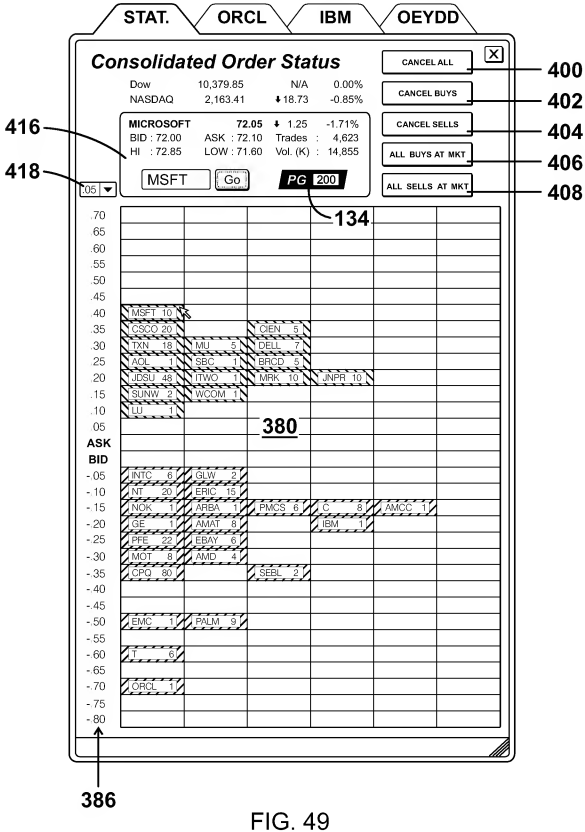

STAT.
ORCL
IBM
OEYDD
Consolidated Order Status
CANCEL ALL
CANCEL BUYS
CANCEL SELLS
ALL BUYS AT MKT
ALL SELLS AT MKT
400
402
404
406
408
Dow 10,379.85 N/A 0.00%
NASDAQ 2,163.41 18.73 -0.85%
MICROSOFT 72.05 1.25 -1.71%
BID : 72.00 ASK : 72.10 Trades : 4,623
HI : 72.85 LOW : 71.60 Vol. (K) : 14,855
416
418
MSFT
Go
PG 200
134
380
386
ASK
BID

FIG. 49

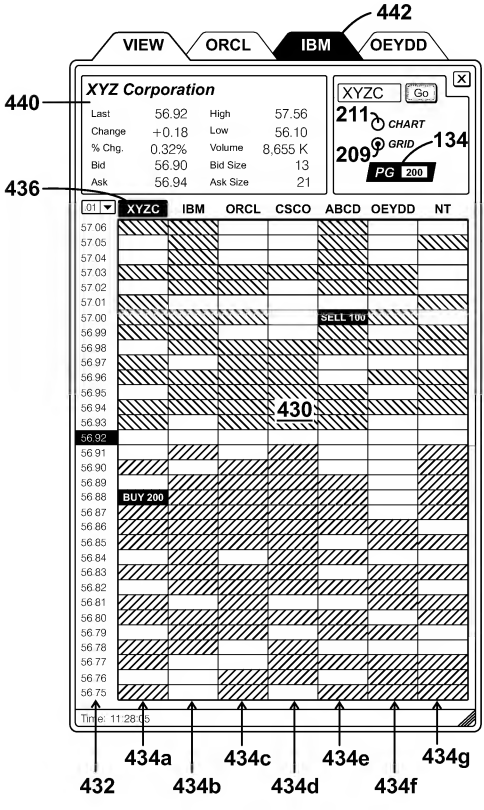

442
VIEW
ORCL
IBM
OEYDD
440
XYZ Corporation
Last 56.92
Change +0.18
% Chg. 0.32%
Bid 56.90
Ask 56.94
High 57.56
Low 56.10
Volume 8.655 K
Bid Size 13
Ask Size 21
XYZC
Go
211
CHART
209
GRID
134
PG 200
436
XYZC
IBM
ORCL
CSCO
ABCD
OEYDD
NT
SELL 100
BUY 200
430
Time: 11:28:05
432
434a
434b
434c
434d
434e
434f
434g

FIG. 50

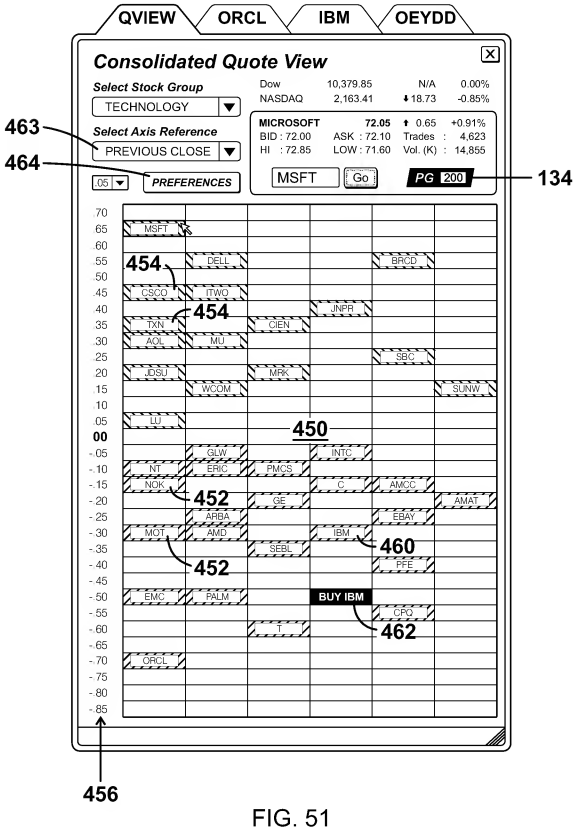

QVIEW
ORCL
IBM
OEYDD
Consolidated Quote View
Select Stock Group
TECHNOLOGY
Select Axis Reference
PREVIOUS CLOSE
PREFERENCES
Dow 10,379.85 N/A 0.00%
NASDAQ 2,163.41 18.73 -0.85%
MICROSOFT 72.05 0.65 +0.91%
BID : 72.00 ASK : 72.10 Trades : 4,623
HI : 72.85 LOW : 71.60 Vol. (K) : 14,855
MSFT
Go
PG 200
463
464
134
454
454
450
452
452
460
462
456
BUY IBM
MSFT
DELL
BRCD
CSCO
ITWO
JNPR
TXN
CIEN
AOL
MU
SBC
JDSU
MRK
WCOM
SUNW
LU
GLW
INTC
NT
ERIC
PMCS
NOK
C
AMCC
GE
AMAT
ARBA
EBAY
MOT
AMD
IBM
SEBL
PFE
EMC
PALM
CPQ
T
ORCL

FIG. 51

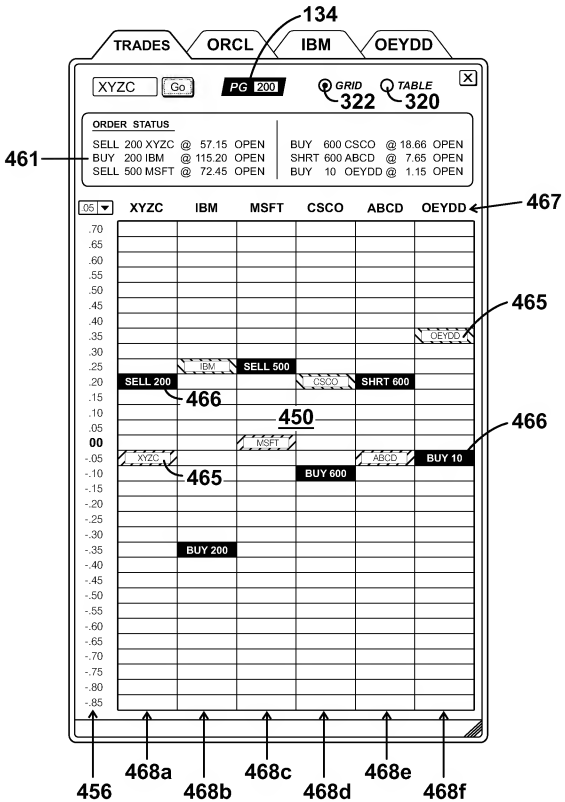

134
TRADES
ORCL
IBM
OEYDD
XYZC
Go
PG 200
GRID
322
TABLE
320
ORDER STATUS
SELL 200 XYZC @ 57.15 OPEN
BUY 200 IBM @ 115.20 OPEN
SELL 500 MSFT @ 72.45 OPEN
BUY 600 CSCO @ 18.66 OPEN
SHRT 600 ABCD @ 7.65 OPEN
BUY 10 OEYDD @ 1.15 OPEN
461
467
05
XYZC
IBM
MSFT
CSCO
ABCD
OEYDD
.70
.65
.60
.55
.50
.45
.40
.35
.30
.25
.20
.15
.10
.05
00
-.05
-.10
-.15
-.20
-.25
-.30
-.35
-.40
-.45
-.50
-.55
-.60
-.65
-.70
-.75
-.80
-.85
465
OEYDD
IBM
SELL 500
SELL 200
CSCO
SHRT 600
466
450
466
MSFT
XYZC
ABCD
BUY 10
465
BUY 600
BUY 200
456
468a
468b
468c
468d
468e
468f

FIG. 52

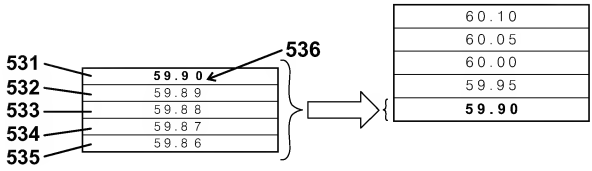


FIG. 53a

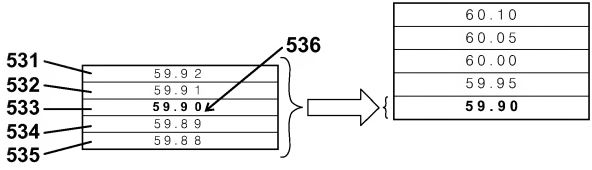


FIG. 53b

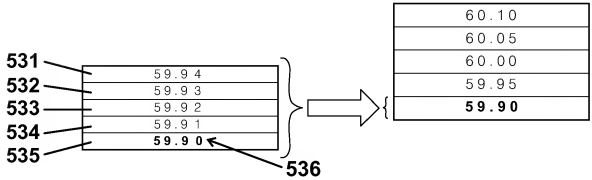


FIG. 53c

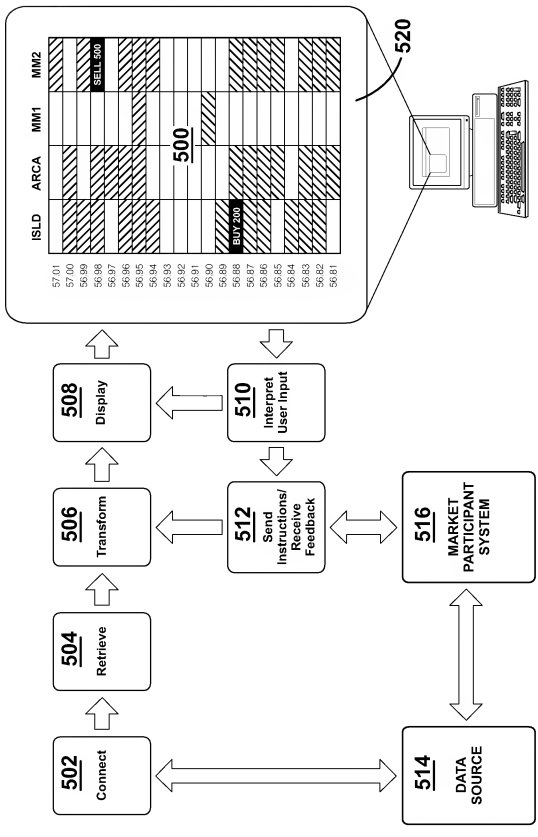

520
500
ISLD
ARCA
MM1
MM2
SELL 500
BUY 200
57.01
57.00
56.99
56.98
56.97
56.96
56.95
56.94
56.93
56.92
56.91
56.90
56.89
56.88
56.87
56.86
56.85
56.84
56.83
56.82
56.81
502 Connect
504 Retrieve
506 Transform
508 Display
510 Interpret User Input
512 Send Instructions/ Receive Feedback
514 DATA SOURCE
516 MARKET PARTICIPANT SYSTEM

FIG. 54

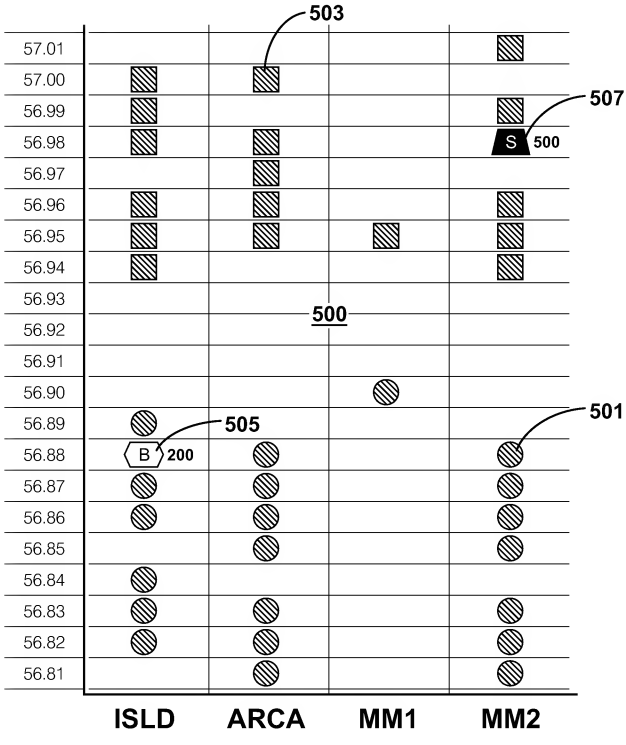

503
507
S
500
500
505
B
200
501
57.01
57.00
56.99
56.98
56.97
56.96
56.95
56.94
56.93
56.92
56.91
56.90
56.89
56.88
56.87
56.86
56.85
56.84
56.83
56.82
56.81
ISLD
ARCA
MM1
MM2

FIG. 55

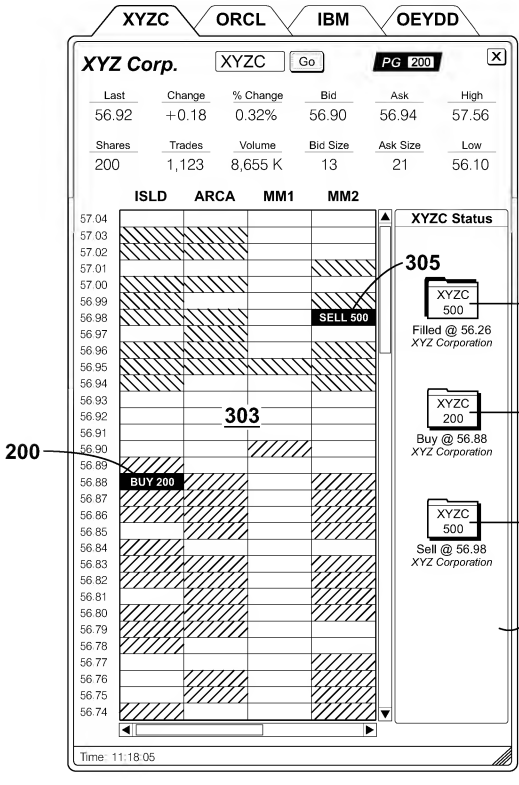

XYZC
ORCL
IBM
OEYDD
XYZ Corp.
XYZC
Go
PG 200
Last
Change
% Change
Bid
Ask
High
56.92
+0.18
0.32%
56.90
56.94
57.56
Shares
Trades
Volume
Bid Size
Ask Size
Low
200
1,123
8,655 K
13
21
56.10
ISLD
ARCA
MM1
MM2
57.04
57.03
57.02
57.01
57.00
56.99
56.98
56.97
56.96
56.95
56.94
56.93
56.92
56.91
56.90
56.89
56.88
56.87
56.86
56.85
56.84
56.83
56.82
56.81
56.80
56.79
56.78
56.77
56.76
56.75
56.74
SELL 500
BUY 200
303
305
200
XYZC Status
XYZC
500
Filled @ 56.26
XYZ Corporation
311
XYZC
200
Buy @ 56.88
XYZ Corporation
307
XYZC
500
Sell @ 56.98
XYZ Corporation
309
301
Time: 11:18:05

FIG. 3

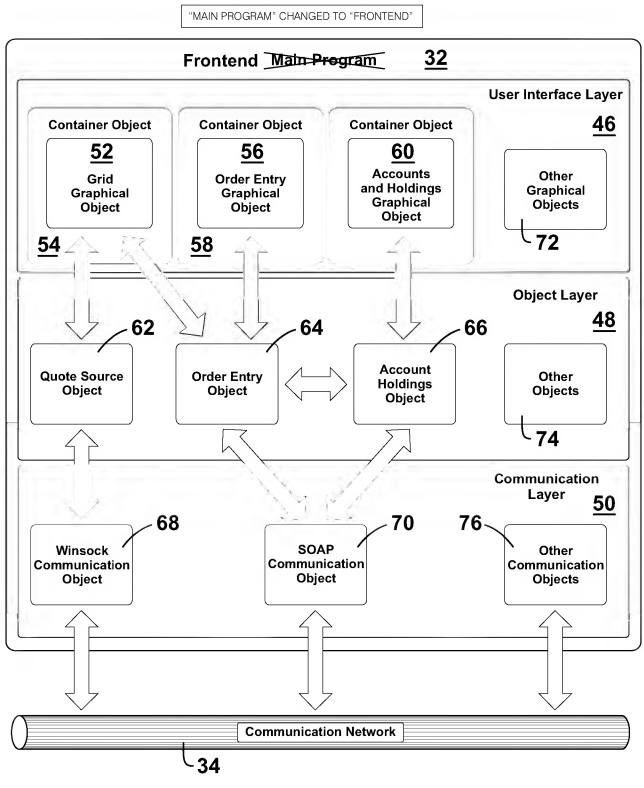

"MAIN PROGRAM" CHANGED TO "FRONTEND"
Frontend
~~Main Program~~
32
User Interface Layer
46
Container Object
52
Grid Graphical Object
Container Object
56
Order Entry Graphical Object
Container Object
60
Accounts and Holdings Graphical Object
Other Graphical Objects
72
54
58
Object Layer
48
62
64
66
Quote Source Object
Order Entry Object
Account Holdings Object
Other Objects
74
Communication Layer
50
68
70
76
Winsock Communication Object
SOAP Communication Object
Other Communication Objects
Communication Network
34

FIG. 5

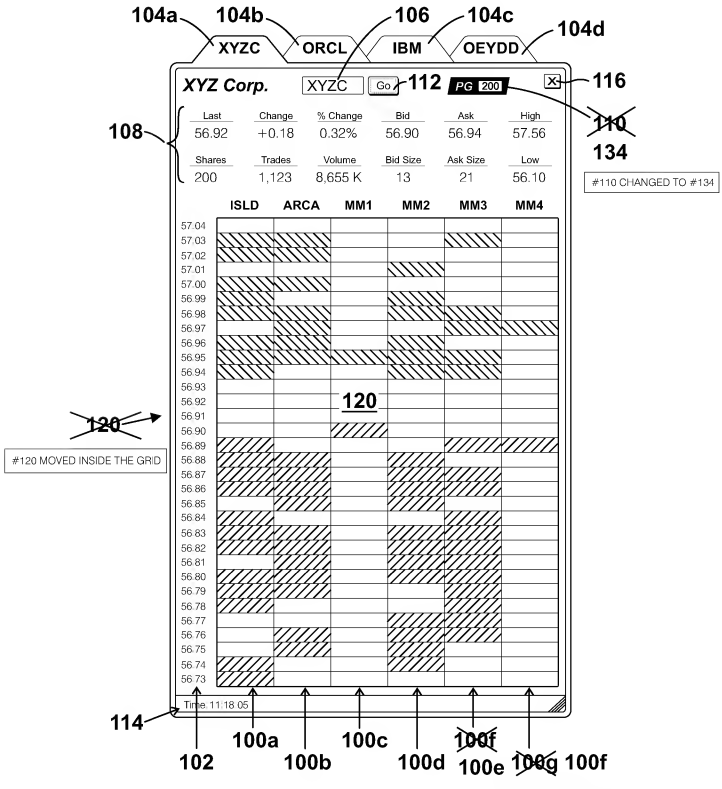

104a
104b
106
104c
104d
XYZC
ORCL
IBM
OEYDD
XYZ Corp.
XYZC
Go
112
PG 200
116
110
134
#110 CHANGED TO #134
108
Last
Change
% Change
Bid
Ask
High
56.92
+0.18
0.32%
56.90
56.94
57.56
Shares
Trades
Volume
Bid Size
Ask Size
Low
200
1,123
8,655 K
13
21
56.10
ISLD
ARCA
MM1
MM2
MM3
MM4
120
120
#120 MOVED INSIDE THE GRID
Time 11:18:05
114
102
100a
100b
100c
100d
100e
100f
100g
100f
#100f CHANGED TO #100e
#100g CHANGED TO #100f

FIG. 10

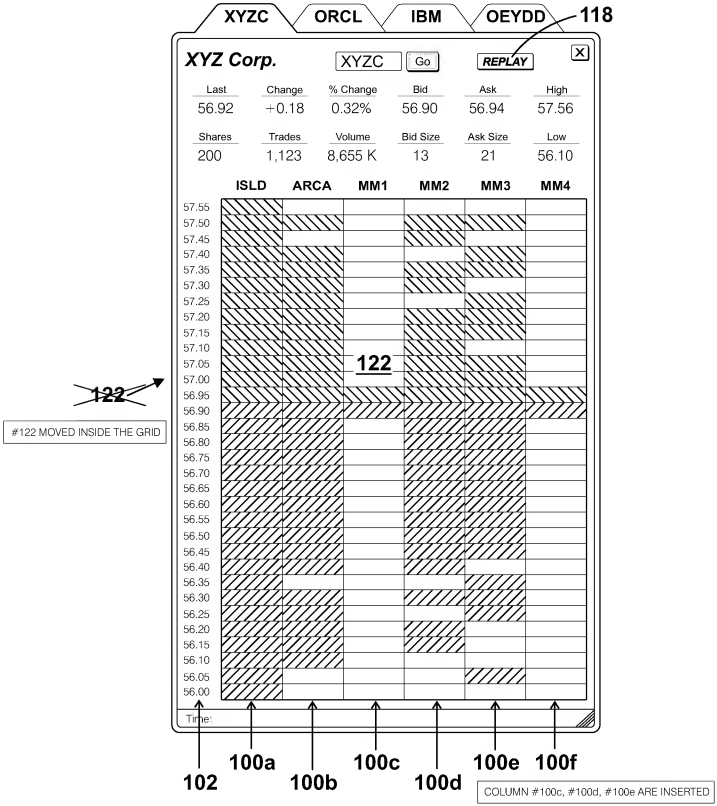

XYZC
ORCL
IBM
OEYDD
118
XYZ Corp.
XYZC
Go
REPLAY
Last
Change
% Change
Bid
Ask
High
56.92
+0.18
0.32%
56.90
56.94
57.56
Shares
Trades
Volume
Bid Size
Ask Size
Low
200
1,123
8,655 K
13
21
56.10
ISLD
ARCA
MM1
MM2
MM3
MM4
122
122
#122 MOVED INSIDE THE GRID
Time:
102
100a
100b
100c
100d
100e
100f
COLUMN #100c, #100d, #100e ARE INSERTED

FIG. 11

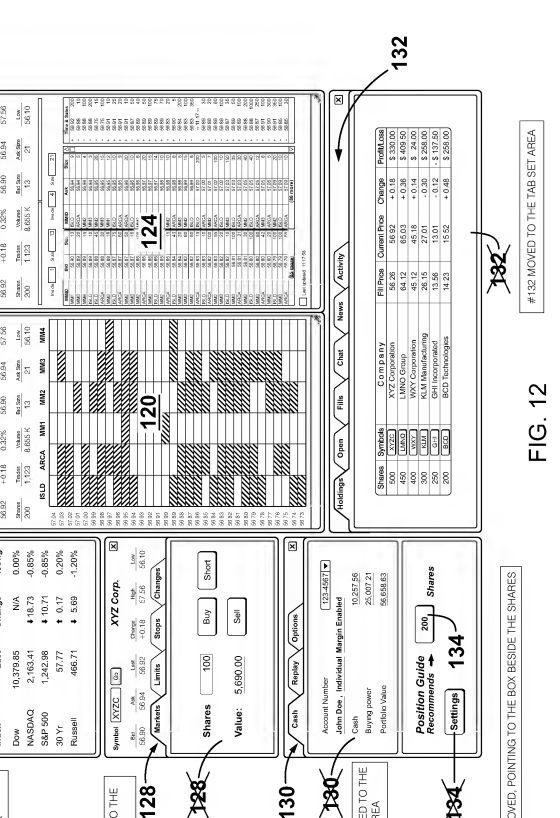

#120 MOVED INSIDE THE GRID
#124 MOVED INSIDE THE TAB
#126 MOVED TO THE TAB SET AREA
#128 MOVED TO THE TAB SET AREA
#130 MOVED TO THE TAB SET AREA
#134 MOVED, POINTING TO THE BOX BESIDE THE SHARES
#132 MOVED TO THE TAB SET AREA
Markets
Indexes
Quotes
Chart
Profile
Limits
Stops
Changes
Replay
Options
Cash
Holdings
Open
Fills
Chat
News
Activity
Shares
Value:
Buy
Short
Sell
Position Guide
Recommends
Settings
120
124
126
128
130
132
134

FIG. 12

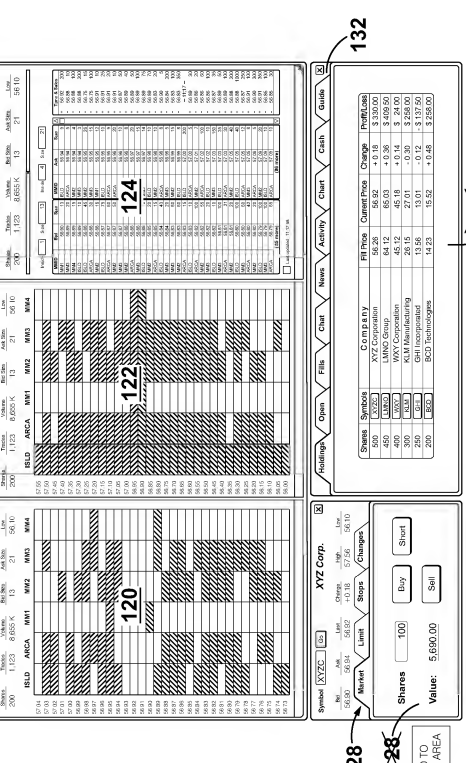

#120 MOVED INSIDE THE GRID
#122 MOVED INSIDE THE GRID
#124 MOVED INSIDE THE TAB
#128 MOVED TO THE TAB SET AREA
#132 MOVED TO THE TAB SET AREA
XYZC
AAPL
DELL
QUOTE
CSCO
NT
IBM
ORCL
OEX
QEYDD
XYZ Corp.
LEVEL II
Holdings
Open
Fills
Chat
News
Activity
Chart
Cash
Guide
Symbol
Market
Limit
Stop
Changes
Shares
Value:
5,690.00
Buy
Sell
Short
120
122
124
128
132

FIG. 13

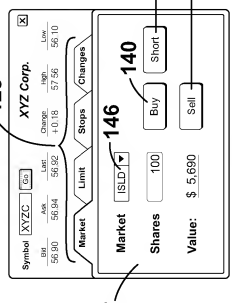


FIG. 16

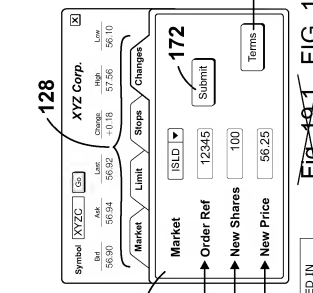


FIG. 17

FIG. 18

Fig. 19.1 FIG. 19

ARROWHEAD INSERTED IN #166, #168, #170 LEADLINES

Fig. 19.1 CHANGED TO FIG. 19

ARROWHEAD INSERTED IN THE #190 LEADLINE
188
130
Cash
Replay
Options
Option Symbol
OEYDD
Specification
OPENING
BUY
Order Type
LIMIT
Contracts
10
Price
1.70
OEX April 620 Calls
S & P 100 Index
Submit
192
190
FIG. 24
#118 INSERTED IN THE REPLAY BUTTON
256
Cash
Replay
Options
Symbol XYZC
Display Options
Center Activity
Show Bid/Ask
Show Trades
Replay
118
Cancel
From
Date 02/12/2001
Time 11:00:00 AM
To
Date 02/12/2001
Time 12:00:00 PM
260
Complete Animation In
Minutes
258
FIG. 39
Position Guide Settings
Symbol
PG 200
134
Invest
Invest
% of Portfolio
% of Buying Power
AND
NO MORE THAN
In each Stock
In each Option
Round Quantity
UP
Advanced Settings
264
110
262
MAXIMUM POSITION IS 2,000 SHARES
Position Guide Recommends
200
Shares
ARROWHEAD INSERTED IN THE #134 LEADLINE
#110 INSERTED INSIDE THE WINDOW
FIG. 40
Special Terms Settings
No Special Terms
All or None
Minimum Quantity
200
Good Till Fill,
10
DAYS
Other Terms
Cancel
Submit
300
FIG. 43

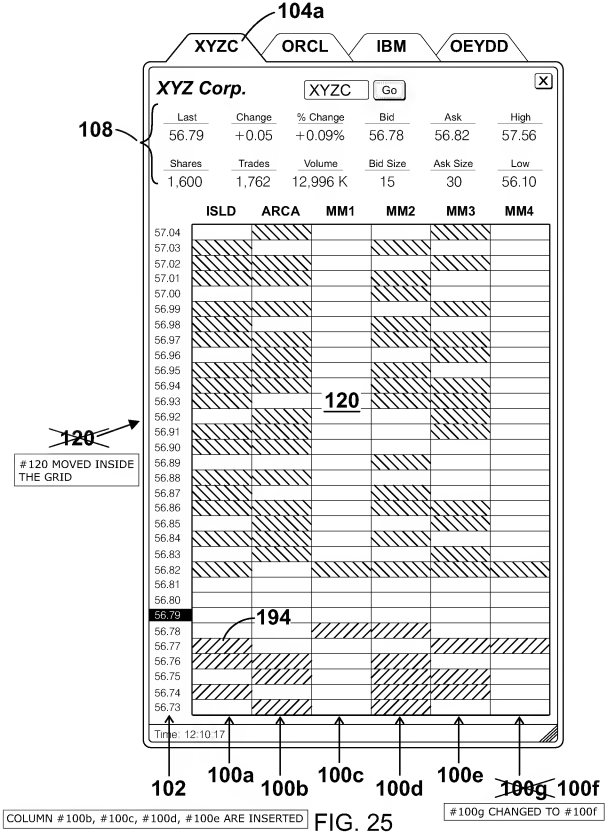

104a
XYZC
ORCL
IBM
OEYDD
XYZ Corp.
XYZC
Go
108
Last
56.79
Change
+0.05
% Change
+0.09%
Bid
56.78
Ask
56.82
High
57.56
Shares
1,600
Trades
1,762
Volume
12,996 K
Bid Size
15
Ask Size
30
Low
56.10
ISLD
ARCA
MM1
MM2
MM3
MM4
120
120
#120 MOVED INSIDE THE GRID
194
Time 12:10:17
102
100a
100b
100c
100d
100e
100g 100f
COLUMN #100b, #100c, #100d, #100e ARE INSERTED
#100g CHANGED TO #100f

FIG. 25

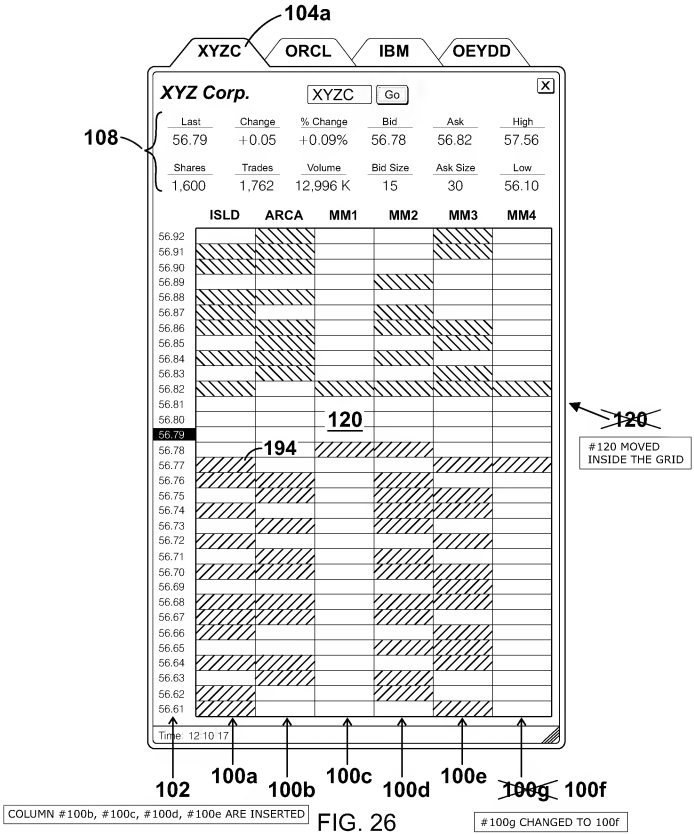

104a
XYZC
ORCL
IBM
OEYDD
XYZ Corp.
XYZC
Go
108
Last
56.79
Change
+0.05
% Change
+0.09%
Bid
56.78
Ask
56.82
High
57.56
Shares
1,600
Trades
1,762
Volume
12,996 K
Bid Size
15
Ask Size
30
Low
56.10
ISLD
ARCA
MM1
MM2
MM3
MM4
120
194
120
#120 MOVED INSIDE THE GRID
Time 12:10:17
102
100a
100b
100c
100d
100e
100g
100f
COLUMN #100b, #100c, #100d, #100e ARE INSERTED
#100g CHANGED TO 100f

FIG. 26

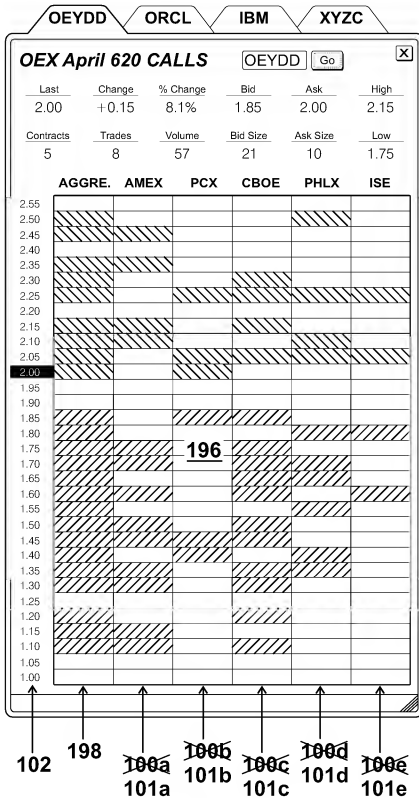


FIG. 27

#100a, #100b, #100c, #100d,#100e CHANGED TO #101a, #101b, #101c, #101d, #101e

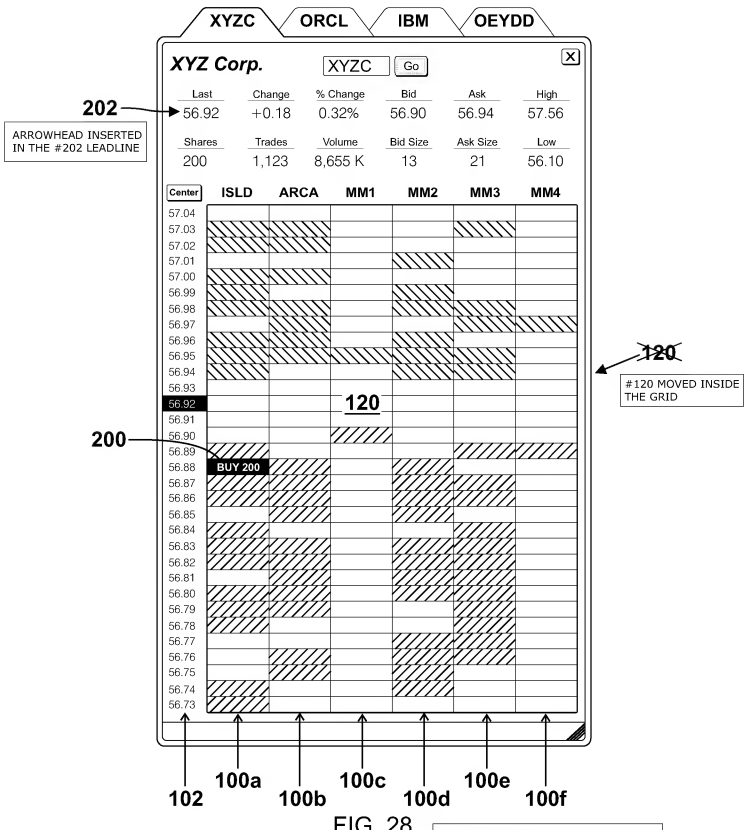

XYZC
ORCL
IBM
OEYDD
XYZ Corp.
XYZC
Go
Last
Change
% Change
Bid
Ask
High
56.92
+0.18
0.32%
56.90
56.94
57.56
Shares
Trades
Volume
Bid Size
Ask Size
Low
200
1,123
8,655 K
13
21
56.10
Center
ISLD
ARCA
MM1
MM2
MM3
MM4
202
ARROWHEAD INSERTED IN THE #202 LEADLINE
120
#120 MOVED INSIDE THE GRID
200
BUY 200
102
100a
100b
100c
100d
100e
100f
COLUMN #100b, #100c, #100d, #100e ARE INSERTED

FIG. 28

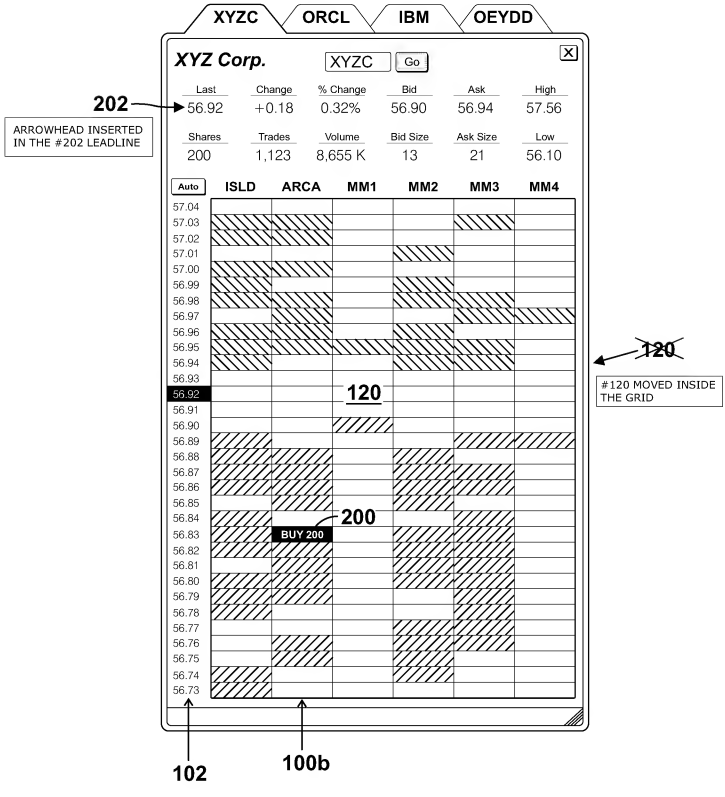

XYZC
ORCL
IBM
OEYDD
XYZ Corp.
XYZC
Go
Last
Change
% Change
Bid
Ask
High
56.92
+0.18
0.32%
56.90
56.94
57.56
Shares
Trades
Volume
Bid Size
Ask Size
Low
200
1,123
8,655 K
13
21
56.10
202
ARROWHEAD INSERTED IN THE #202 LEADLINE
Auto
ISLD
ARCA
MM1
MM2
MM3
MM4
120
#120 MOVED INSIDE THE GRID
200
BUY 200
102
100b

FIG. 29

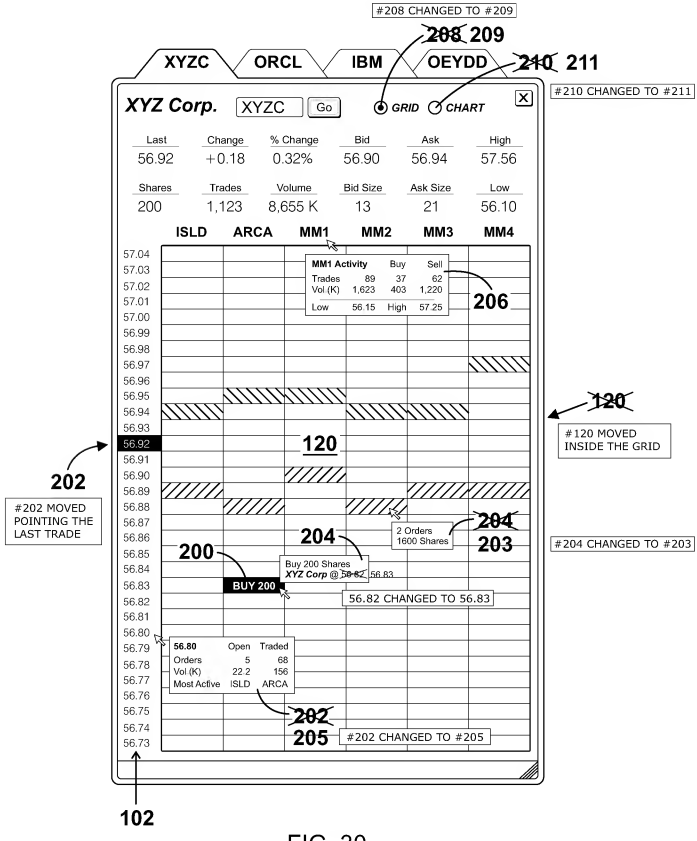

#208 CHANGED TO #209
208 209
XYZC
ORCL
IBM
OEYDD
210 211
#210 CHANGED TO #211
XYZ Corp.
XYZC
Go
GRID
CHART
Last
56.92
Change
+0.18
% Change
0.32%
Bid
56.90
Ask
56.94
High
57.56
Shares
200
Trades
1,123
Volume
8,655 K
Bid Size
13
Ask Size
21
Low
56.10
ISLD
ARCA
MM1
MM2
MM3
MM4
MM1 Activity
Buy
Sell
Trades
89
37
62
Vol.(K)
1,623
403
1,220
Low
56.15
High
57.25
206
120
#120 MOVED INSIDE THE GRID
202
#202 MOVED POINTING THE LAST TRADE
120
204
2 Orders
1600 Shares
204
203
#204 CHANGED TO #203
200
204
Buy 200 Shares
XYZ Corp @ 56.82 56.83
BUY 200
56.82 CHANGED TO 56.83
56.80
Open
Traded
Orders
5
68
Vol.(K)
22.2
156
Most Acfive
ISLD
ARCA
202
205
#202 CHANGED TO #205
102

FIG. 30

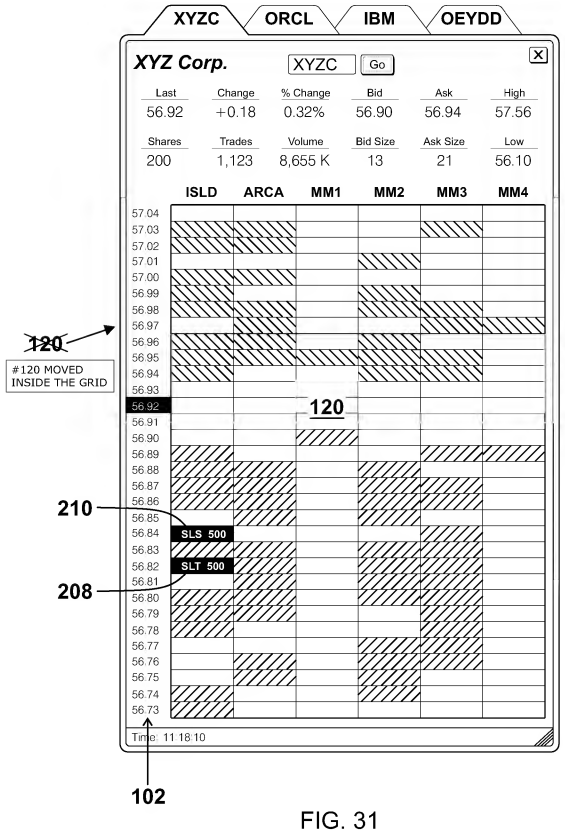

XYZC
ORCL
IBM
OEYDD
XYZ Corp.
XYZC
Go
Last
Change
% Change
Bid
Ask
High
56.92
+0.18
0.32%
56.90
56.94
57.56
Shares
Trades
Volume
Bid Size
Ask Size
Low
200
1,123
8,655 K
13
21
56.10
ISLD
ARCA
MM1
MM2
MM3
MM4
120
#120 MOVED INSIDE THE GRID
120
210
208
SLS 500
SLT 500
102
Time: 11:18:10

FIG. 31

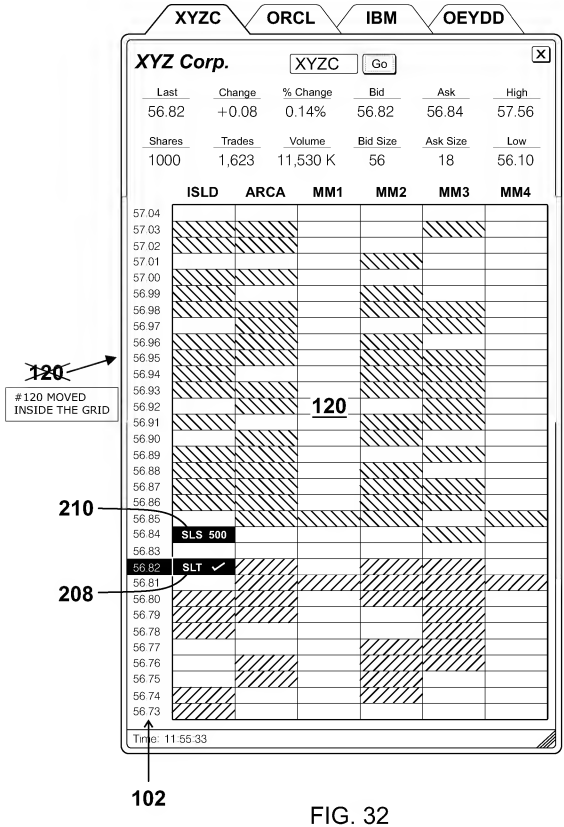

XYZC
ORCL
IBM
OEYDD
XYZ Corp.
XYZC
Go
Last
Change
% Change
Bid
Ask
High
56.82
+0.08
0.14%
56.82
56.84
57.56
Shares
Trades
Volume
Bid Size
Ask Size
Low
1000
1,623
11,530 K
56
18
56.10
ISLD
ARCA
MM1
MM2
MM3
MM4
120
#120 MOVED INSIDE THE GRID
120
210
SLS 500
208
SLT
102
Time: 11.55.33

FIG. 32

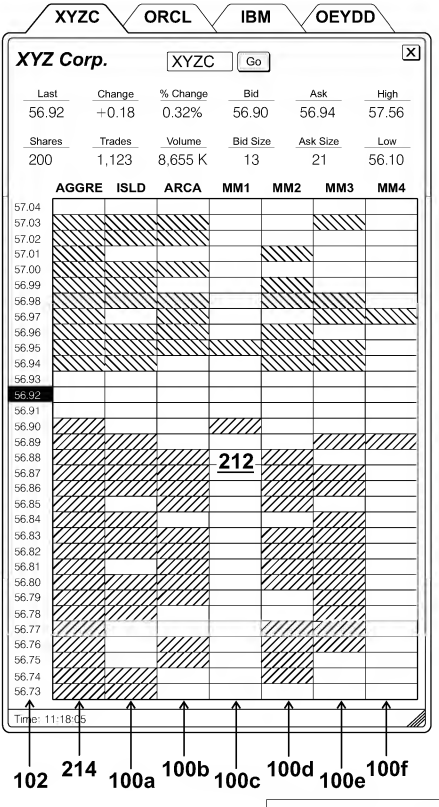

XYZC
ORCL
IBM
OEYDD
XYZ Corp.
XYZC
Go
Last
Change
% Change
Bid
Ask
High
56.92
+0.18
0.32%
56.90
56.94
57.56
Shares
Trades
Volume
Bid Size
Ask Size
Low
200
1,123
8,655 K
13
21
56.10
AGGRE
ISLD
ARCA
MM1
MM2
MM3
MM4
57.04
57.03
57.02
57.01
57.00
56.99
56.98
56.97
56.96
56.95
56.94
56.93
56.92
56.91
56.90
56.89
56.88
56.87
56.86
56.85
56.84
56.83
56.82
56.81
56.80
56.79
56.78
56.77
56.76
56.75
56.74
56.73
212
Time: 11:18:05
212
#212 MOVED INSIDE THE GRID
102
214
100a
100b
100c
100d
100e
100f
COLUMN #100b, #100c, #100d, #100e ARE INSERTED

FIG. 33

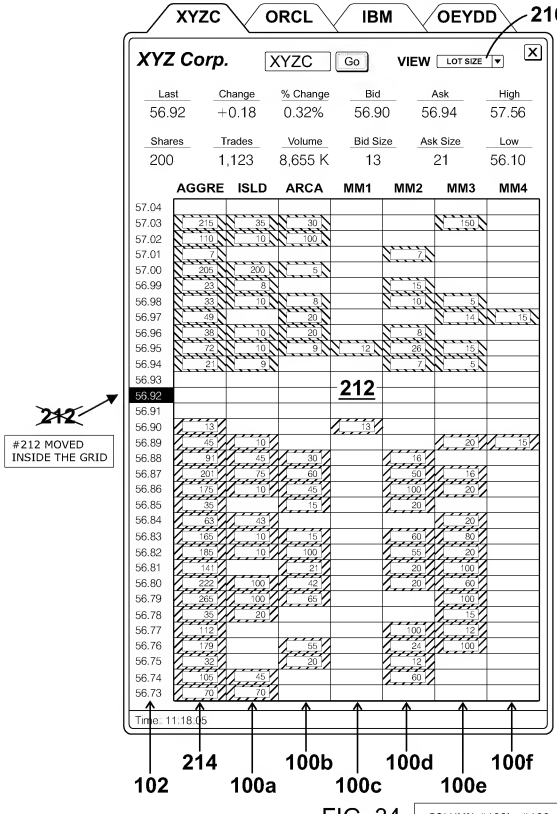

XYZC
ORCL
IBM
OEYDD
216
XYZ Corp.
XYZC
Go
VIEW
LOT SIZE
Last
Change
% Change
Bid
Ask
High
56.92
+0.18
0.32%
56.90
56.94
57.56
Shares
Trades
Volume
Bid Size
Ask Size
Low
200
1,123
8,655 K
13
21
56.10
AGGRE
ISLD
ARCA
MM1
MM2
MM3
MM4
212
212
#212 MOVED INSIDE THE GRID
Time: 11:18:05
102
214
100a
100b
100c
100d
100e
100f
COLUMN #100b, #100c, #100d, #100e ARE INSERTED

FIG. 34

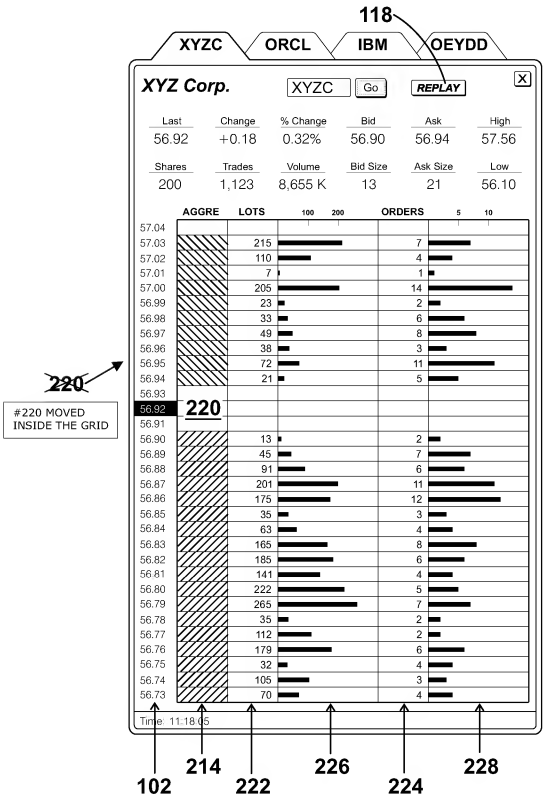

118
XYZC
ORCL
IBM
OEYDD
XYZ Corp.
XYZC
Go
REPLAY
Last
56.92
Change
+0.18
% Change
0.32%
Bid
56.90
Ask
56.94
High
57.56
Shares
200
Trades
1,123
Volume
8,655 K
Bid Size
13
Ask Size
21
Low
56.10
AGGRE
LOTS
100
200
ORDERS
5
10
220
#220 MOVED INSIDE THE GRID
Time 11:18:05
102
214
222
226
224
228

FIG. 35

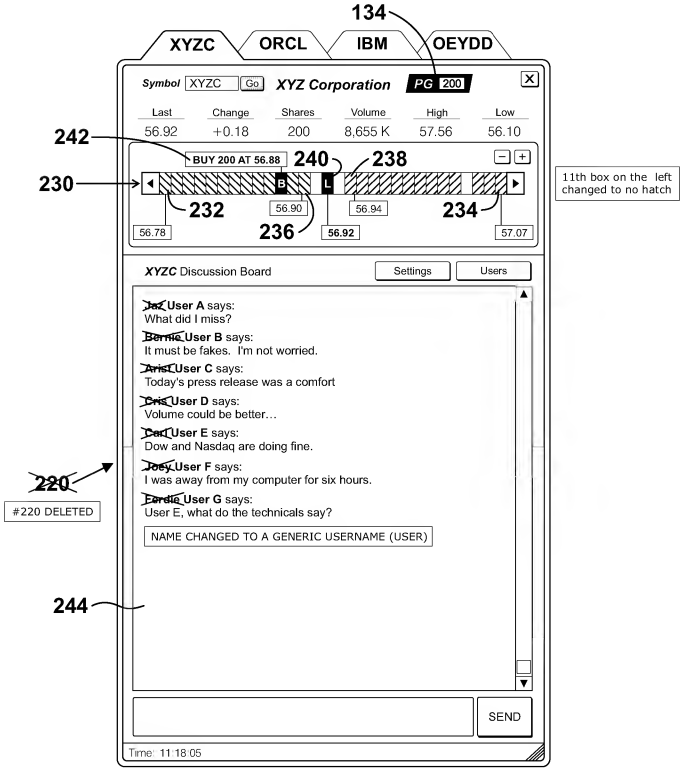

134
XYZC
ORCL
IBM
OEYDD
Symbol XYZC Go
XYZ Corporation
PG 200
Last Change Shares Volume High Low
56.92 +0.18 200 8,655 K 57.56 56.10
242
BUY 200 AT 56.88
240
238
230
B
L
11th box on the left changed to no hatch
232
56.90
56.94
234
56.78
236
56.92
57.07
XYZC Discussion Board
Settings
Users
Jax User A says:
What did I miss?
Bernie User B says:
It must be fakes. I'm not worried.
Aris User C says:
Today's press release was a comfort
Cris User D says:
Volume could be better…
Carl User E says:
Dow and Nasdaq are doing fine.
Josy User F says:
I was away from my computer for six hours.
Eardie User G says:
User E, what do the technicals say?
220
#220 DELETED
NAME CHANGED TO A GENERIC USERNAME (USER)
244
SEND
Time: 11:18:05

FIG. 36

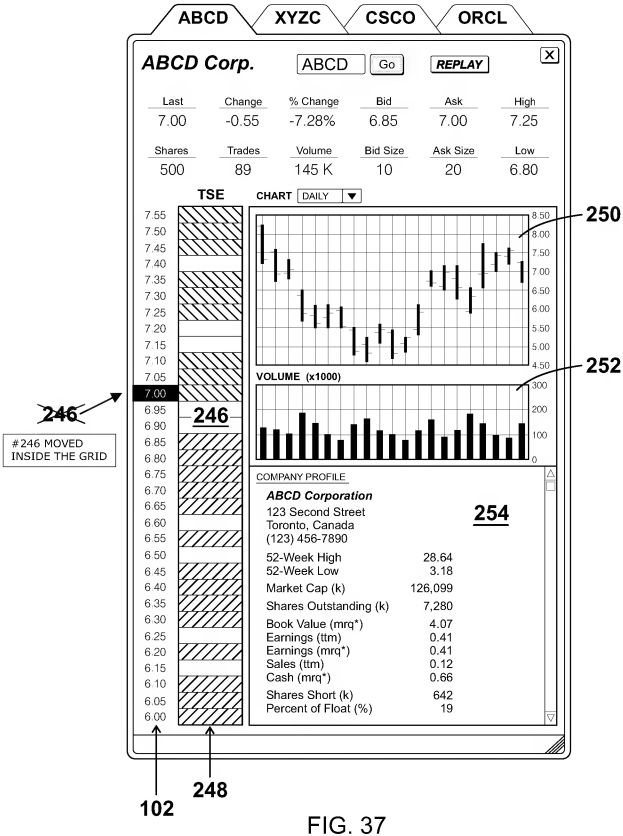

ABCD
XYZC
CSCO
ORCL
ABCD Corp.
ABCD
Go
REPLAY
Last
Change
% Change
Bid
Ask
High
7.00
-0.55
-7.28%
6.85
7.00
7.25
Shares
Trades
Volume
Bid Size
Ask Size
Low
500
89
145 K
10
20
6.80
TSE
CHART
DAILY
250
252
VOLUME (x1000)
246
246
#246 MOVED INSIDE THE GRID
COMPANY PROFILE
ABCD Corporation
123 Second Street
Toronto, Canada
(123) 456-7890
254
52-Week High 28.64
52-Week Low 3.18
Market Cap (k) 126,099
Shares Outstanding (k) 7,280
Book Value (mrq*) 4.07
Earnings (ttm) 0.41
Earnings (mrq*) 0.41
Sales (ttm) 0.12
Cash (mrq*) 0.66
Shares Short (k) 642
Percent of Float (%) 19
102
248

FIG. 37

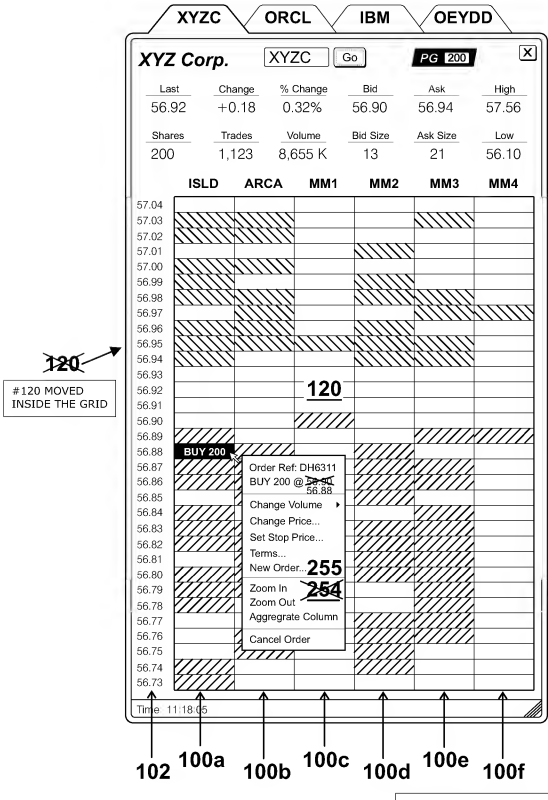

XYZC
ORCL
IBM
OEYDD
XYZ Corp.
XYZC
Go
PG 200
Last
56.92
Change
+0.18
% Change
0.32%
Bid
56.90
Ask
56.94
High
57.56
Shares
200
Trades
1,123
Volume
8,655 K
Bid Size
13
Ask Size
21
Low
56.10
ISLD
ARCA
MM1
MM2
MM3
MM4
120
#120 MOVED INSIDE THE GRID
BUY 200
Order Ref: DH6311
BUY 200 @ 56.90
56.88
Change Volume
Change Price...
Set Stop Price...
Terms...
New Order...
Zoom In
Zoom Out
Aggregrate Column
Cancel Order
255
254
56.90 CHANGED TO 56.88
#254 CHANGED TO #255
Time 11:18:05
102
100a
100b
100c
100d
100e
100f
COLUMN #100b, #100c, #100d, #100e ARE INSERTED

FIG. 38

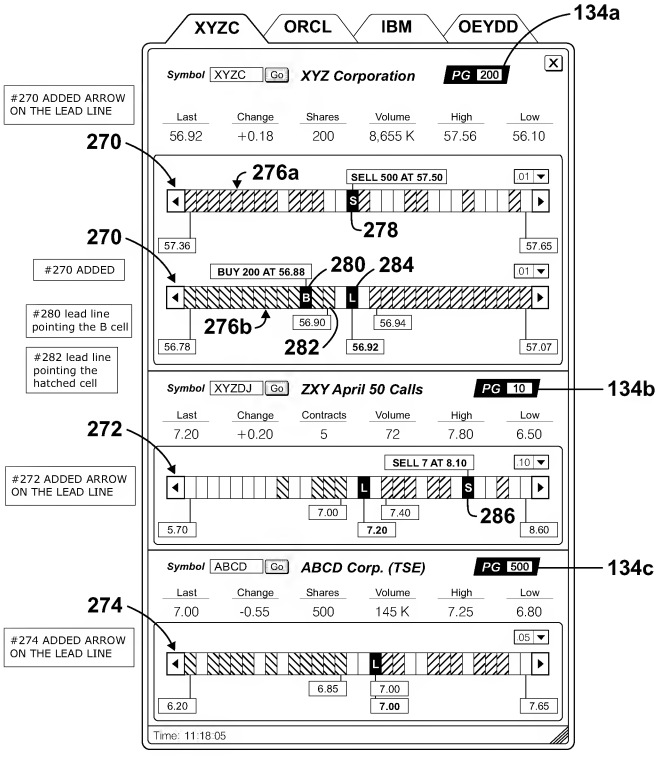

XYZC
ORCL
IBM
OEYDD
134a
Symbol XYZC Go
XYZ Corporation
PG 200
X
#270 ADDED ARROW ON THE LEAD LINE
Last Change Shares Volume High Low
56.92 +0.18 200 8,655 K 57.56 56.10
270
276a
SELL 500 AT 57.50
.01
S
278
57.36
57.65
270
#270 ADDED
BUY 200 AT 56.88
280
284
.01
B
L
#280 lead line pointing the B cell
276b
56.90
56.94
#282 lead line pointing the hatched cell
282
56.78
56.92
57.07
Symbol XYZDJ Go
ZXY April 50 Calls
PG 10
134b
Last Change Contracts Volume High Low
7.20 +0.20 5 72 7.80 6.50
272
SELL 7 AT 8.10
10
#272 ADDED ARROW ON THE LEAD LINE
L
S
7.00
7.40
286
5.70
7.20
8.60
Symbol ABCD Go
ABCD Corp. (TSE)
PG 500
134c
Last Change Shares Volume High Low
7.00 -0.55 500 145 K 7.25 6.80
274
.05
#274 ADDED ARROW ON THE LEAD LINE
L
6.85
7.00
6.20
7.00
7.65
Time: 11:18:05

FIG. 41

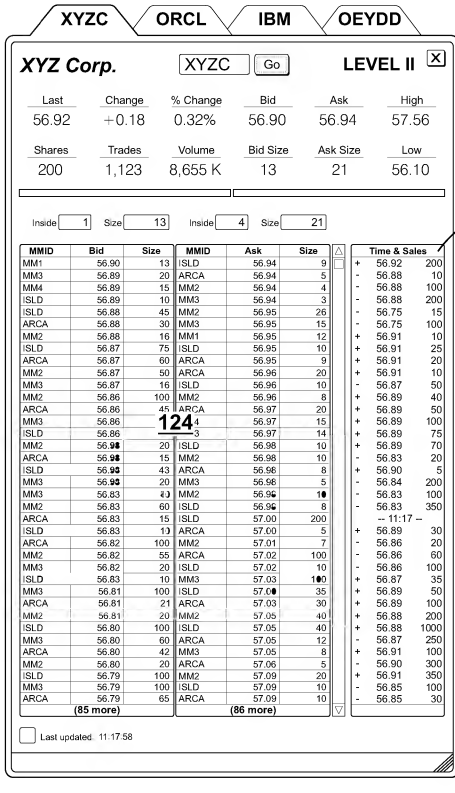

XYZC
ORCL
IBM
OEYDD
XYZ Corp.
XYZC
Go
LEVEL II
Last
56.92
Change
+0.18
% Change
0.32%
Bid
56.90
Ask
56.94
High
57.56
Shares
200
Trades
1,123
Volume
8,655 K
Bid Size
13
Ask Size
21
Low
56.10
Inside 1 Size 13
Inside 4 Size 21
290
MMID Bid Size
MM1 56.90 13
MM3 56.89 20
MM4 56.89 15
ISLD 56.89 10
ISLD 56.88 45
ARCA 56.88 30
MM2 56.88 16
ISLD 56.87 75
ARCA 56.87 60
MM2 56.87 50
MM3 56.87 16
MM2 56.86 100
ARCA 56.86 45
MM3 56.86 124
ISLD 56.86
MM2 56.85 20
ARCA 56.85 15
ISLD 56.85 43
MM3 56.84 20
MM3 56.83 20
MM2 56.83 60
ARCA 56.83 15
ISLD 56.83 10
ARCA 56.82 100
MM2 56.82 55
MM3 56.82 20
ISLD 56.83 10
MM3 56.81 100
ARCA 56.81 21
MM2 56.81 20
ISLD 56.80 100
MM3 56.80 60
ARCA 56.80 42
MM2 56.80 20
ISLD 56.79 100
MM3 56.79 100
ARCA 56.79 65
(85 more)
MMID Ask Size
ISLD 56.94 9
ARCA 56.94 5
MM2 56.94 4
MM3 56.94 3
MM2 56.95 26
MM3 56.95 15
MM1 56.95 12
ISLD 56.95 10
ARCA 56.95 9
ARCA 56.96 20
ISLD 56.96 10
MM2 56.96 8
ARCA 56.97 20
MM4 56.97 15
MM3 56.97 14
ISLD 56.98 10
MM2 56.98 10
ARCA 56.98 8
MM3 56.98 5
MM2 56.98 10
ISLD 56.98 8
ISLD 57.00 200
ARCA 57.00 5
MM2 57.01 7
ARCA 57.02 100
ISLD 57.02 10
MM3 57.03 100
ISLD 57.03 35
ARCA 57.03 30
MM2 57.05 40
ISLD 57.05 40
ARCA 57.05 12
MM3 57.05 8
ARCA 57.06 5
MM2 57.09 20
ISLD 57.09 10
ARCA 57.09 10
(86 more)
Time & Sales
+ 56.92 200
- 56.88 10
- 56.88 100
- 56.88 200
- 56.75 15
- 56.75 100
+ 56.91 10
+ 56.91 25
+ 56.91 20
+ 56.91 10
- 56.87 50
+ 56.89 40
+ 56.89 50
+ 56.89 100
+ 56.89 75
+ 56.89 70
- 56.83 20
+ 56.90 5
- 56.84 200
- 56.83 100
- 56.83 350
-- 11:17 --
+ 56.89 30
- 56.86 20
- 56.86 60
- 56.86 100
+ 56.87 35
+ 56.89 50
+ 56.89 100
+ 56.88 200
+ 56.88 1000
- 56.87 250
+ 56.91 100
- 56.90 300
+ 56.91 350
- 56.85 100
- 56.85 30
124
#124 MOVED INSIDE THE TAB
Last updated: 11:17:58

FIG. 42

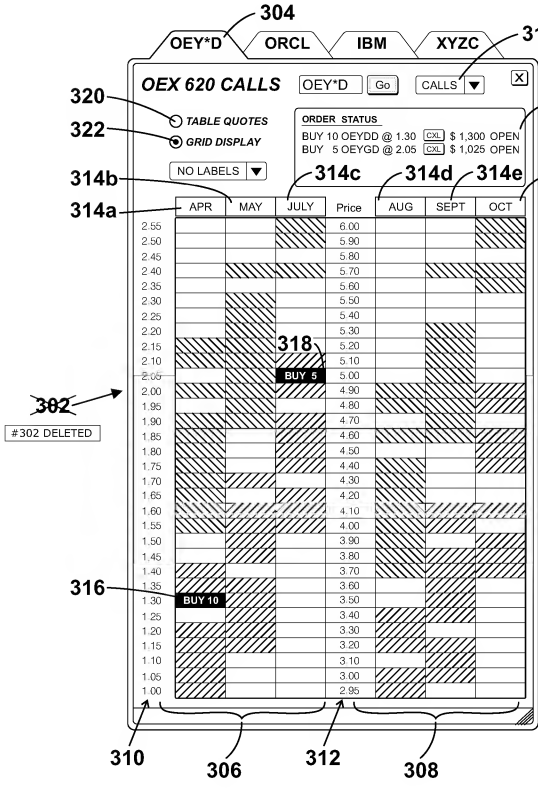

304
OEY*D
ORCL
IBM
XYZC
319
OEX 620 CALLS
OEY*D
Go
CALLS
320
TABLE QUOTES
322
GRID DISPLAY
321
ORDER STATUS
BUY 10 OEYDD @ 1.30 CXL $ 1,300 OPEN
BUY 5 OEYGD @ 2.05 CXL $ 1,025 OPEN
NO LABELS
314b
314a
314c
314d
314e
314f
APR
MAY
JULY
Price
AUG
SEPT
OCT
318
BUY 5
302
#302 DELETED
316
BUY 10
310
306
312
308

FIG. 44

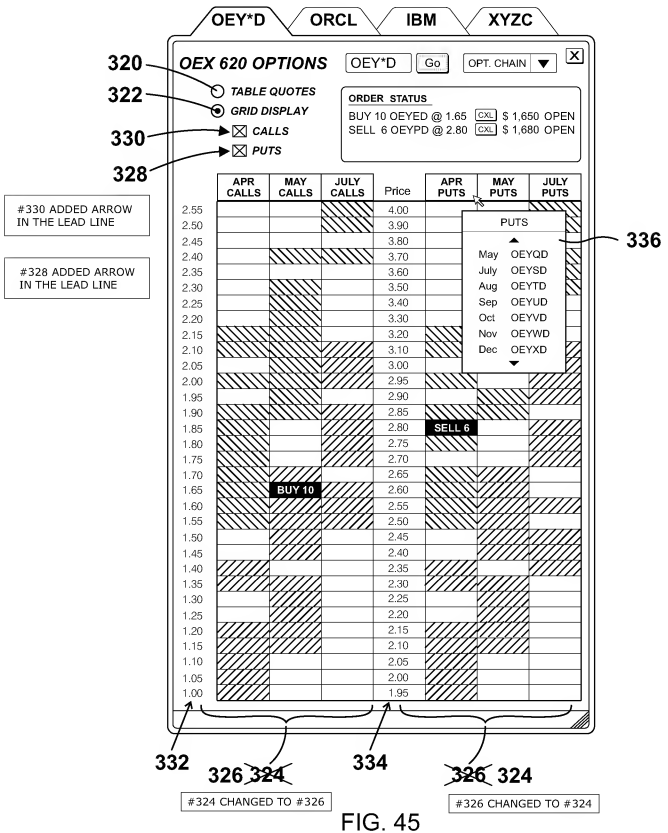

OEY*D
ORCL
IBM
XYZC
OEX 620 OPTIONS
OEY*D
Go
OPT. CHAIN
320
TABLE QUOTES
322
GRID DISPLAY
330
CALLS
328
PUTS
ORDER STATUS
BUY 10 OEYED @ 1.65 CXL $ 1,650 OPEN
SELL 6 OEYPD @ 2.80 CXL $ 1,680 OPEN
#330 ADDED ARROW IN THE LEAD LINE
#328 ADDED ARROW IN THE LEAD LINE
APR CALLS
MAY CALLS
JULY CALLS
Price
APR PUTS
MAY PUTS
JULY PUTS
PUTS
May OEYQD
July OEYSD
Aug OEYTD
Sep OEYUD
Oct OEYVD
Nov OEYWD
Dec OEYXD
336
SELL 6
BUY 10
332
326 324
334
326 324
#324 CHANGED TO #326
#326 CHANGED TO #324

FIG. 45

#330 ADDED ARROW IN THE LEAD LINE

#328 ADDED ARROW IN THE LEAD LINE

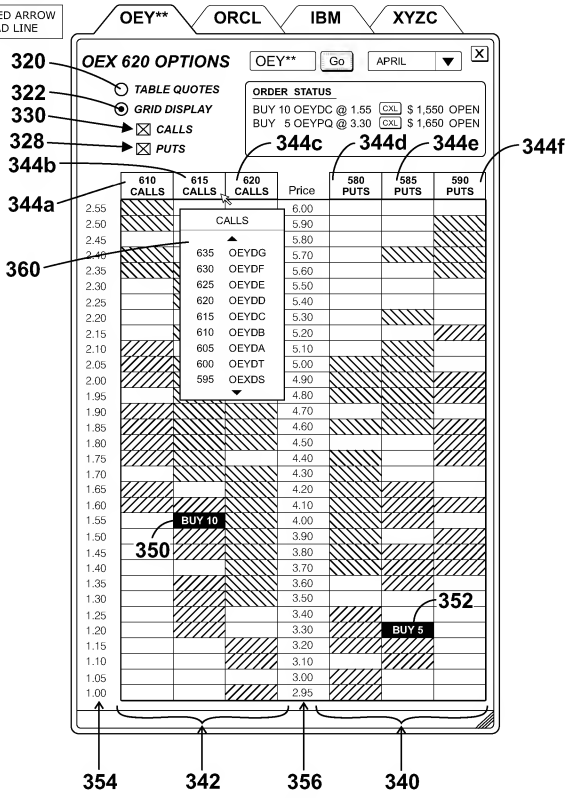


FIG. 46

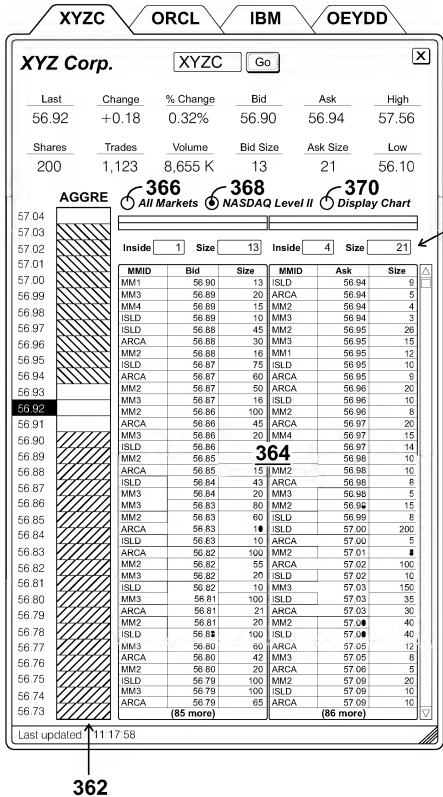

XYZC
ORCL
IBM
OEYDD
XYZ Corp.
XYZC
Go
Last
56.92
Change
+0.18
% Change
0.32%
Bid
56.90
Ask
56.94
High
57.56
Shares
200
Trades
1,123
Volume
8,655 K
Bid Size
13
Ask Size
21
Low
56.10
AGGRE
366
All Markets
368
NASDAQ Level II
370
Display Chart
364
#364 MOVED INSIDE THE TAB
Inside 1
Size 13
Inside 4
Size 21
MMID
Bid
Size
MMID
Ask
Size
(85 more)
(86 more)
Last updated 11:17:58
362

FIG. 47

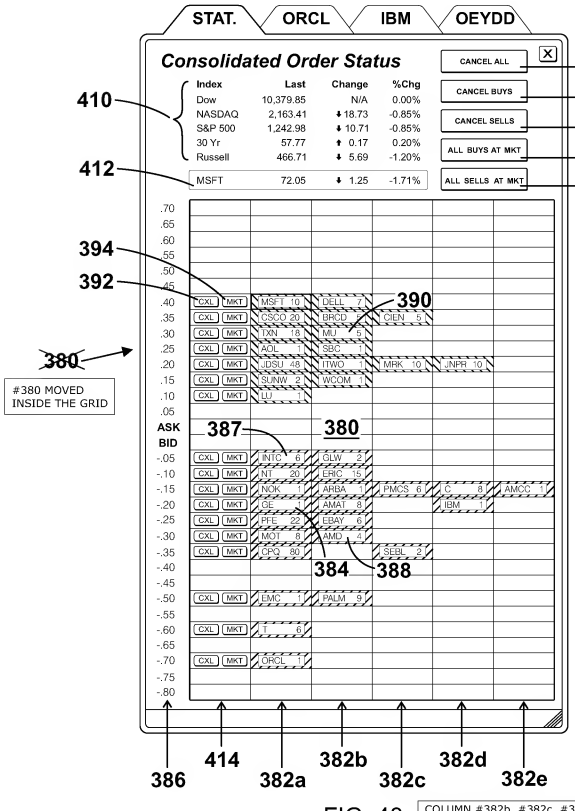


FIG. 48

COLUMN #382b, #382c, #382d ARE INSERTED

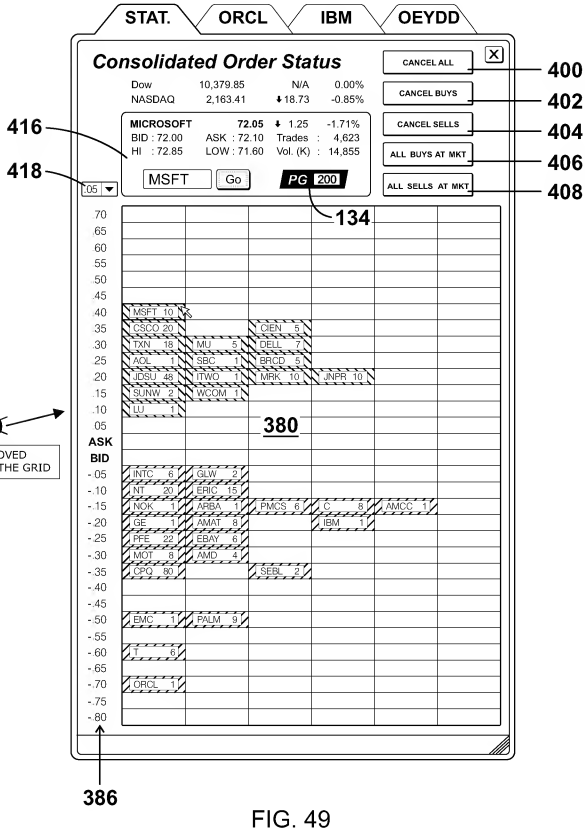

STAT.
ORCL
IBM
OEYDD
Consolidated Order Status
CANCEL ALL
CANCEL BUYS
CANCEL SELLS
ALL BUYS AT MKT
ALL SELLS AT MKT
400
402
404
406
408
Dow 10,379.85 N/A 0.00%
NASDAQ 2,163.41 18.73 -0.85%
MICROSOFT 72.05 1.25 -1.71%
BID : 72.00 ASK : 72.10 Trades : 4,623
HI : 72.85 LOW : 71.60 Vol. (K) : 14,855
416
418
MSFT
Go
PG 200
134
380
380
#380 MOVED INSIDE THE GRID
ASK
BID
386

FIG. 49

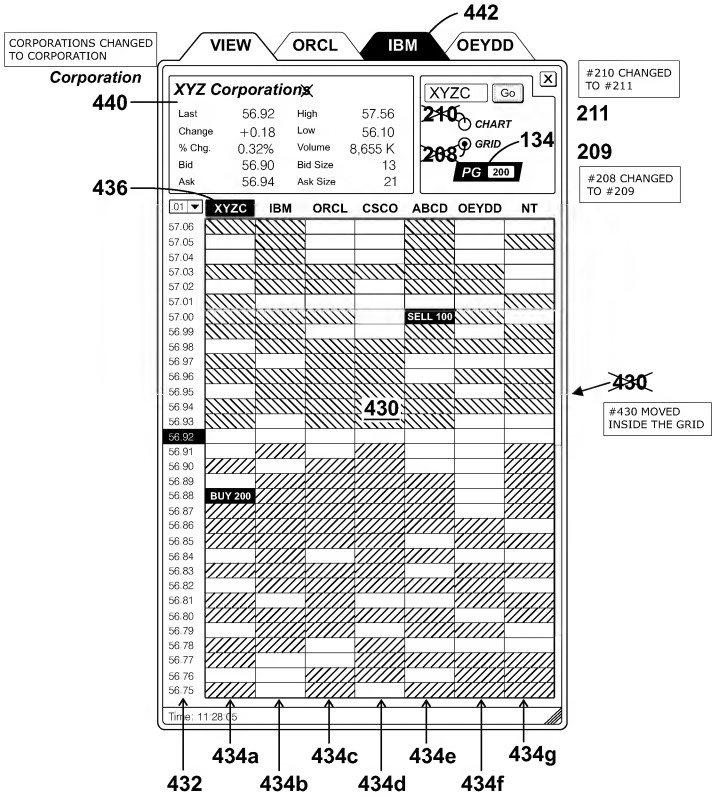

442
CORPORATIONS CHANGED TO CORPORATION
VIEW
ORCL
IBM
OEYDD
#210 CHANGED TO #211
Corporation
440
XYZ Corporation
Last 56.92
Change +0.18
% Chg. 0.32%
Bid 56.90
Ask 56.94
High 57.56
Low 56.10
Volume 8,655 K
Bid Size 13
Ask Size 21
XYZC
Go
240
CHART
208
GRID
134
PG 200
211
209
#208 CHANGED TO #209
436
01
XYZC
IBM
ORCL
CSCO
ABCD
OEYDD
NT
SELL 100
BUY 200
430
430
#430 MOVED INSIDE THE GRID
Time: 11:28:05
432
434a
434b
434c
434d
434e
434f
434g

FIG. 50

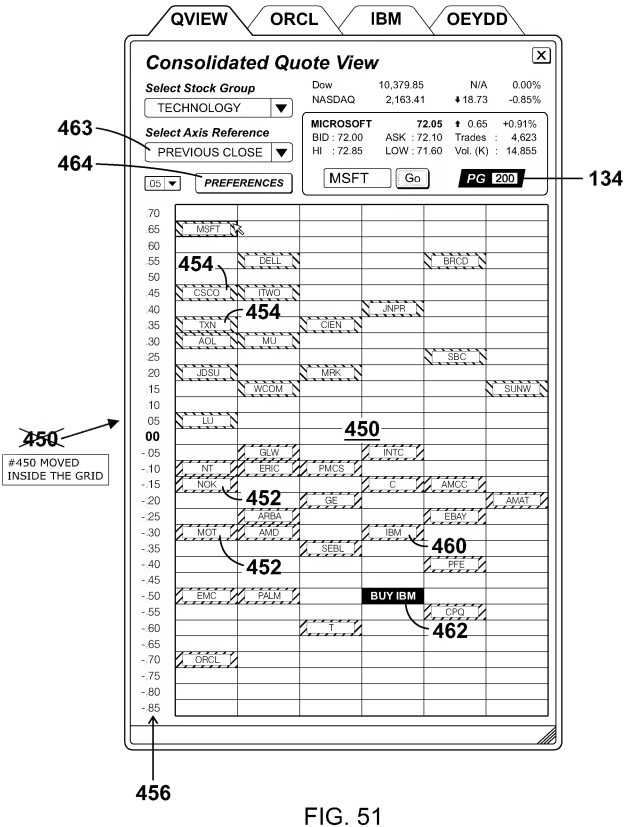

QVIEW
ORCL
IBM
OEYDD
Consolidated Quote View
Select Stock Group
TECHNOLOGY
Select Axis Reference
PREVIOUS CLOSE
PREFERENCES
Dow 10,379.85 N/A 0.00%
NASDAQ 2,163.41 18.73 -0.85%
MICROSOFT 72.05 0.65 +0.91%
BID : 72.00 ASK : 72.10 Trades : 4,623
HI : 72.85 LOW : 71.60 Vol. (K) : 14,855
MSFT Go PG 200
463
464
134
454
450
452
460
462
456
#450 MOVED INSIDE THE GRID
BUY IBM

FIG. 51

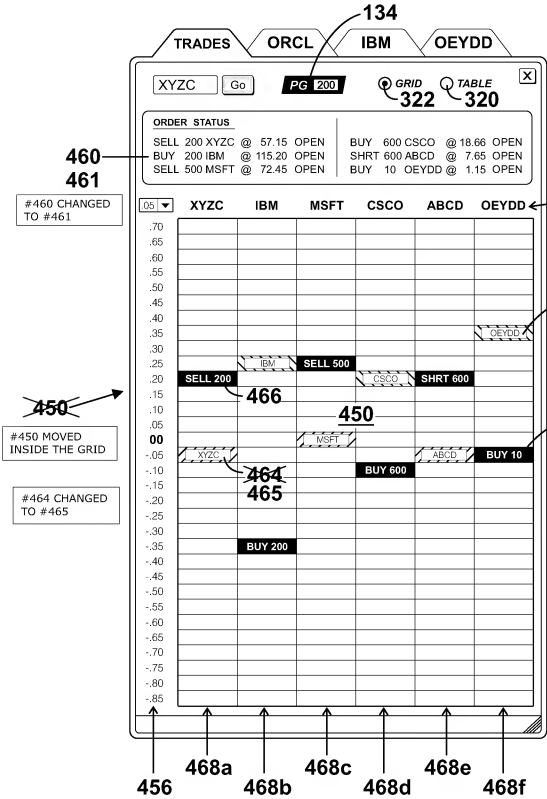


FIG. 52 COLUMN #468b, #468c, #468d, #468e ARE INSERTED

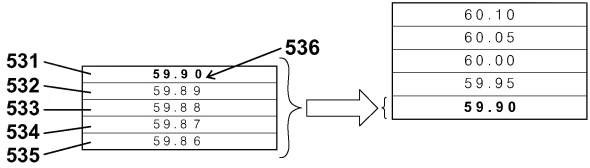


FIG. 53a

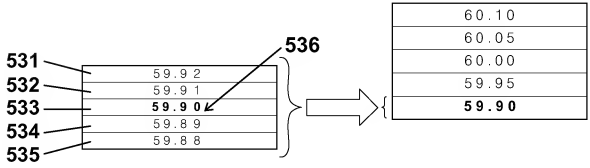


FIG. 53b

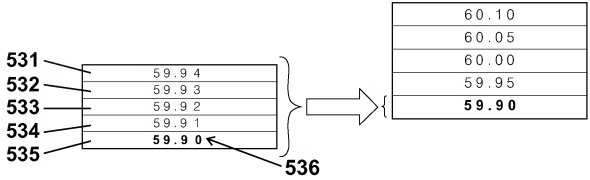


FIG. 53c

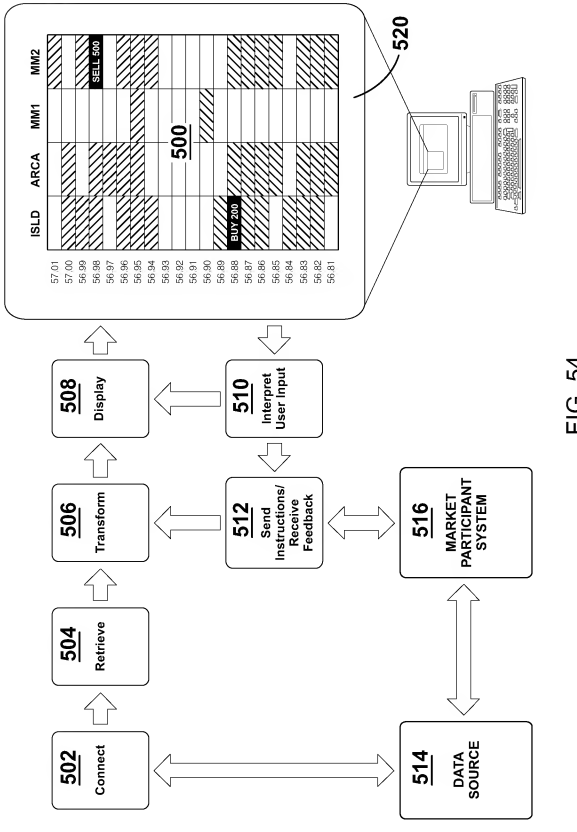

520
ISLD
ARCA
MM1
MM2
500
SELL 500
BUY 200
57.01
57.00
56.99
56.98
56.97
56.96
56.95
56.94
56.93
56.92
56.91
56.90
56.89
56.88
56.87
56.86
56.85
56.84
56.83
56.82
56.81
502 Connect
504 Retrieve
506 Transform
508 Display
510 Interpret User Input
512 Send Instructions/ Receive Feedback
514 DATA SOURCE
516 MARKET PARTICIPANT SYSTEM

FIG. 54

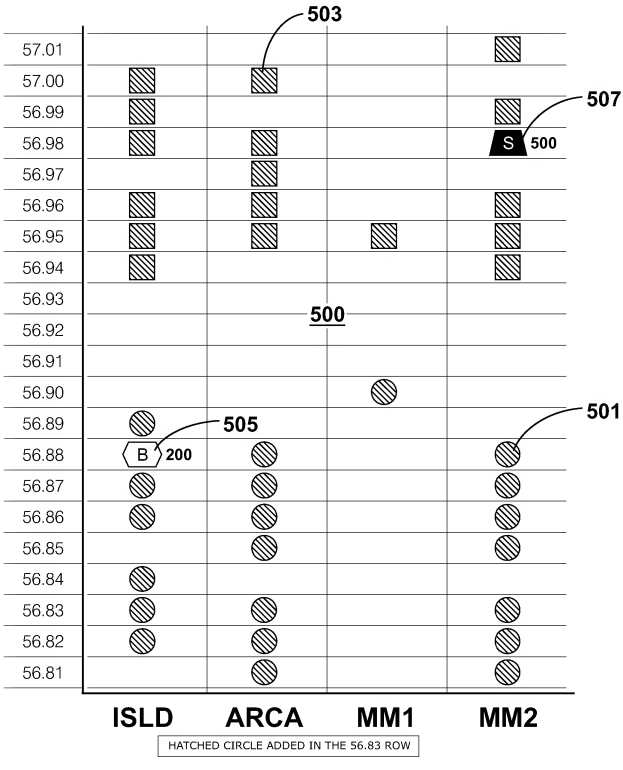

503
507
S
500
500
501
505
B
200
57.01
57.00
56.99
56.98
56.97
56.96
56.95
56.94
56.93
56.92
56.91
56.90
56.89
56.88
56.87
56.86
56.85
56.84
56.83
56.82
56.81
ISLD
ARCA
MM1
MM2
HATCHED CIRCLE ADDED IN THE 56.83 ROW

FIG. 55